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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

ORIGINAL

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

S. 2248

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 1983 FOR PROCUREMENT, FOR RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, AND FOR OPERATION AND MAINTENANCE FOR THE ARMED FORCES, TO PRESCRIBE PERSONNEL STRENGTHS FOR THE ARMED FORCES AND FOR CIVILIAN PERSONNEL OF THE DEPARTMENT OF DEFENSE, AND FOR OTHER PURPOSES

PART 5—PREPAREDNESS

FEBRUARY 23, 26; MARCH 1, 2, 3, 5, 8, 9, 12, 15, 16, 17, 18, 1982

COMPLETED

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Printed for the use of the Committee on Armed Services

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, FEBRUARY 23, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

ARMY OPERATIONAL READINESS

The subcommittee met in open session, pursuant to notice, at 9:35 a.m., in room 224, Russell Senate Office Building, Hon. Gordon J. Humphrey (chairman) presiding.

Present: Senators Humphrey and Levin.

Staff present: Michael B. Donley, professional staff member; Christine E. Cowart, chief clerk; Anthony J. Principi, counsel; Frank Gaffney, Richard D. Finn, and David S. Lyles, professional staff members; Carol J. Rudolph, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey; Jon Etherton, assistant to Senator Jepsen; Gray Armistead, assistant to Senator Byrd; and Peter Lennon, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The Preparedness Subcommittee meets in its first hearing for the fiscal year 1983 budget cycle to receive testimony on Army operational readiness. We are pleased to have with us: Gen. Frederick Kroesen, Commanding General, U.S. Army, Europe; Gen. John A. Wickman, Jr., Commander, U.S. Forces, Korea, and 8th U.S. Army; and Lt. Gen. Marion C. Ross, Deputy Commanding General, U.S. Army Forces Command.

The subcommittee's interest in the operational readiness of the major military commands is based upon our appreciation of the extent to which we must rely on forces in being able to meet a range of threats on short notice. Manpower shortages in the current force structure place a premium on taking full advantage of existing capabilities. However, during the late 1970's the readiness of U.S. forces was called into question by budget and management decisions which had the effect of sapping the strength of our forces rather than adding to it.

We are aware of the additional funding experienced in the revised fiscal year 1981 and 1982 budgets. There is perhaps no simpler test of the administration's defense program than to ask if this additional funding has improved the readiness of forces.

The witnesses before us are responsible for the majority of the Army's combat units. It is our intention to discuss the readiness of these units in broad terms of adequate force structure to meet the threat, personnel and equipment readiness and combat sustainability. I hope a more thorough understanding of these issues from the commander's perspective will ultimately improve the relationship between the Army's force structure and its commitments, and between resource allocation and combat readiness.

Gentlemen, I welcome you here this morning. We will receive statements from you at this time in order of seniority. General Kroesen, will you begin? You may proceed as you wish.

[The prepared statement of General Kroesen follows:]

PREPARED STATEMENT OF GEN. FREDERICK J. KROESEN, COMMANDER IN CHIEF, U.S. ARMY, EUROPE

Mr. Chairman, members of the committee, I appreciate this opportunity to appear before your subcommittee, first to thank you and the Congress for the increase in funding support which US Army, Europe received in 1981 and 1982. With these resources, Congress fully funded the Command's requirements for training, supported improvements in readiness, and improved the facilities in which we live and work. We were able to hire 6,000 civilians allowing us to return about 5,700 soldiers to their training tasks. We received increased funding for military construction and for reducing the backlog of maintenance and repair of facilities, and you made possible increases in theater reserve stocks and prepositioned (POMCUS) equipment. In short, the past year was one of considerable progress and the current year promises an increase in the momentum of all of these positive developments.

My second purpose today of course is to describe the current readiness of US Army, Europe and to justify your continued support of our program of manning, training, modernizing, and sustaining our forces and the soldiers, civilians, and families of the command, and to reduce the risks that contrast our mission with our capabilities.

The mission of US Army, Europe is two-fold: To deter aggression and to prepare for the combat operations required for the defense of NATO, should deterrence fail. US Army, Europe is accomplishing that mission in conjunction with other NATO forces. [Deleted.]

Currently we have equipment [deleted]. These factors establish a fourth risk which in fact compounds the first three.

Army forces stationed in Europe are manned at [deleted]. In the last year, we have made major improvements in the status of these stocks, [deleted].

The cumulative effect of the risks associated with the forces of US Army, Europe places in question our ability to conduct prolonged combat operations. If everything in our war plans goes perfectly, and each of the risks proves to be prudent, we should be at the margin of success. However, the equation upon which these risks were calculated has been changing rapidly. The Soviet Army continues a very rapid and comprehensive modernization, and many of its allies are re-equipping as well. The Warsaw Pact conventional ground threat is considerably stronger than it was when our minimum force requirements were last calculated. They continue to add heavy, modern equipment, increase the sophistication of their forces, and demonstrate a capability to operate effectively. In short, the Soviets are already introducing changes in their forces which match those that we are still planning for future modernization. Consequently, the gap between NATO and Warsaw Pact relative force capabilities has continued to widen and the risks once considered acceptable may in fact no longer be prudent. Further, the Soviet forces and its allies pose a major chemical warfare threat to our forces. The Soviets possess a wide variety of modern chemical agents and delivery systems, and their doctrine envisages employment of chemicals on a massive scale. They have an active research, development, test, and evaluation program and a large well trained and dedicated chemical warfare force. The chemical warfare threat is real and we cannot, indeed must not, overlook it.

To summarize this situation, the United States is committed by previous agreements [deleted].

There are initiatives which we might undertake to increase our capabilities and to minimize risks.

MANNING U.S. ARMY, EUROPE

I mentioned that we are manned at approximately [deleted]. Any reduction of this shortage, that is any increase in manning levels, which contribute to combat power and sustainability. Such increases are not programed and can be attained only either at the expense of other Army commands or by an increase in the overall end-strength of the Army.

We still face the problem of borrowing soldiers from their training to perform peacetime housekeeping activities. The 5,300 civilian hire authorizations in FY 81 solved more than half of our problem, and this year we expect to apply an additional 2,300 civilian authorizations to release diverted military manpower. This will leave us with about 800 such jobs, which should be performed by civilians, still filled by soldiers.

Within our manpower authorizations we continue to have imbalances among noncommissioned officers and specialist technicians. The only real solution to this problem and to the new challenge of training soldiers to operate and maintain new equipment, introducing them to the right unit at the right time, is the adequate funding of our training base, the Army NCO Education System and re-enlistment and career-attracting incentives.

TRAINING U.S. ARMY EUROPE

A well trained force is imperative for reducing the risks described earlier. There is a no question that the soldiers and units of US Army, Europe are well trained. All measurable or quantifiable factors attest to this. Nevertheless, the force could and and should be trained better. Training progress is hindered by limited ammunition allowances and a lack of sufficient training areas and modern facilities and ranges. We have an immediate need of training devices and simulators and the ranges and training area improvements which we have programed for the coming years. The Congress has directed that we seek NATO funding for these improvements, and we have done so, but there are no NATO funds available and no NATO responsibility for providing training facilities of this nature. For those reasons I ask that Congress reconsider this need and authorize the funds that we must have to provide adequate combat preparedness training for our soldiers.

MODERNIZING IN U.S. ARMY EUROPE

Force modernization, which is an essential for reducing risks, is underway in Europe. The M-1 Abrams Tank is being issued and the 3d Battalion, 64th Armor of the 3d Infantry Division is now training with the Abrams at Grafenwoehr. We have established a very professional transition program for these units and we are very pleased that the Officers, NCO's and soldiers are most enthused about their new tank, satisfied that they really do have the finest tank in the world. A Stars and Stripes articles which addresses this transition has been provided for insertion in the Congressional Record. We have begun to receive the AH-1S Cobra Attack Helicopter, another item which enjoys great troop acceptance and confidence and which adds significantly to our tank-killing capability. [Deleted.]

Modernization is also improving our structure. Last year two more divisional combat electronic warfare intelligence battalions were activated and our ability at division level to find targets and produce intelligence will be improved because of this. But we were extremely disappointed to learn of the cancellation of the Standoff Target Acquisition System (SOTAS). It was a serious blow to our efforts to improve the Army's intelligence collection and over the hill target acquisition capability. The Guardrail (COMINT-DF) and Quicklook are excellent, but we do not have adequate airfields and facilities to employ sufficient numbers of these system to meet wartime requirements. A deep look capability is vital in Europe, and we still need systems which can find, track, and target the enemy's second echelon forces.

Command, control, and communications [deleted]. We are programmed to start receiving this equipment in FY 83.

Last year I reported to you that USAREUR is well-equipped, well-maintained, and adequately supported by the logistic system. [Deleted.]

Modernization is essential, but equipping the command totally, to include especially, our war reserves and POMCUS stocks, even with rebuilt models of old equipment, is just as important, is in fact a critical readiness issue. Requests for such equipment are also included in this year's budget submission. [Deleted.]

Funding for the fifth and sixth division sets has been denied by Congress for the past two years, but site preparation and construction using NATO funding is proceeding and we have again requested authority to stock these sets.

The combat service support structure needed [deleted].

CHEMICAL WARFARE

We have made good progress in providing our forces with chemical defensive equipment, conducting realistic defensive training and providing the special expertise necessary to survive a chemical attack. However, we need both a defense and retaliatory capability if we hope to deter chemical warfare. Reliance solely on impoved defenses would permit the Soviets to operate with a major advantage and, indeed, could encourage use of chemical warfare. Therefore, we must reestablish our retaliatory capability—failure to do so could result in chemical warfare. Our current stockpile is totally inadequate and must be modernized. We need the binary munitions requested by the DOD FY 83 budget now.

QUALITY OF LIFE IN U.S. ARMY EUROPE

When I spoke to you last year I indicated that the greatest concern of commanders in Europe was the appalling living and working conditions that many of our soldiers must endure. These conditions remain a vital concern, not only because there is a clear responsibility here to provide properly for soldiers and their families, but also because there is a clear connection between living and working conditions and readiness. The support we received in FY 82 to attack the maintenance backlog in our barracks and soldier work areas provided tangible evidence to the command that improvements are happening. But our facilities problems did not crop up overnight and they will not be corrected overnight. Our backlog of maintenance and repair is still $1.37 billion, and only sustained funding through the eighties will attain a reasonable standard.

Family housing continues to be our most serious peacetime problem, and we have not made noticeable headway. Three years after I first identified family housing as our primary problem area, I am asking today that you approve an FY 82 FMHA supplemental to provide the maintenance funds that are absolutely essential for this year's operations. Beyond the need for maintenance and repair, the continuing lack of the numbers of sets of quarters required for our forces relegates thousands of families each year to waiting lists, some of which require a wait for more than a year. Many soldiers do not bring their families, choosing instead an unaccompanied two year tour. Your favorable action on increased leasing authority and small construction programs will allow us to make a modest overall improvement.

The Congress has been aware for over two years of US Army, Europe's master restationing plan, [deleted]. Meanwhile, I assure you that our requests for construction in FY 82 and 83 are essential for modernization and are appropriate even if we never execute the MRP. We will continue to abide by the Congress' intent, but it has long been apparent that there is not enough room in our current facilities to accomodate the modernization we have programed. We must build somewhere and the locations selected are the most appropriate for new structure and new equipment.

SUMMARY

I reported last year that the Army in Europe was a ready force. We continue to be a ready force this year, a force of high quality, well-trained, and properly motivated soldiers. We hope we have made progress through improved leadership, training, management, and the incorporation of the new equipment which has been provided. But we remain a long way from providing the fully adequate training, the first class facilities, and the total environment which approximately 400,000 soldiers, US civilians, and family members in Europe deserve. In January of this year, a German radio network conducted a series of interviews with American soldiers concerning their duty in Europe. Listening to their interviews it becomes abundantly clear that despite the visible improvement of 1981 and the promise for 1982, soldiers who live in the barracks do not want to be in Germany, and soldiers whose families do not have government furnished quarters do not want to be in Germany. The more senior soldiers, non-commissioned officers and officers, reveal a marked satisfaction, even enthusiasm for their assignments, an enthusiasm that grows directly with the grade structure and their eligibility for government housing. Service in Europe still does not have a proper acceptance among soldiers, too many still try to avoid such service, too many leave their families at home. We are doing better, but not enough and not fast enough. We have a good Army in Europe. It meets readiness standards as well or better than our peacetime Armies of the past. It enjoys the priorities appropriate for a deployed force in a potential combat theater.

But it is an Army which has not been supported adequately in the past, which can and should be better than it is. It is faced with formidable tasks and obstacles which are associated with programs to modernize equipment, force structure, facilities and stationing. My understanding of the '83 Budget request is that it represents modest progress for meeting those tasks and overcoming the obstacles.

STATEMENT OF GEN. FREDERICK J. KROESEN, COMMANDER IN CHIEF, U.S. ARMY, EUROPE

General **Kroesen**. Thank you, Mr. Chairman. I submitted a formal statement for the record, but I ask if I may have your permission to make a few highlights from that statement.

Senator **Humphrey**. Yes, of course. The submitted statement will be printed into the record as submitted in full for all witnesses.

General **Kroesen**. Sir, I appreciate this opportunity to appear before your subcommittee, first to thank you and the Congress for the increases in funding the U.S. Army in Europe received in 1981 and 1982. With these resources, Congress fully funded the command's requirements for training, supported improvements in readiness, and improved the facilities in which we live and work.

My second purpose today, of course, is to describe the current readiness of the U.S. Army, Europe, and to justify your continued support of our program of manning, training, modernizing, and sustaining our forces and the soldiers, civilians and families of the command, and to reduce the risks that contrast our mission with our capabilities.

The mission of U.S. Army, Europe, is twofold. To deter aggression and to prepare for the combat operations required for the defense of NATO, should deterrence fail. U.S. Army, Europe, is accomplishing this mission in conjunction with other NATO forces. With its wartime authorization of men, materiel, and supplies, U.S. Army, Europe is capable of initiating the defense of the NATO sectors which are assigned to U.S. forces. We have accepted risks in developing our capabilities to employ this force, to reinforce it, and to sustain it in combat.

PEACETIME MANNING

The force lacks sufficient force structure and war reserve stocks for prolonged combat. We depend on reinforcements that must come rapidly and in a high state of combat readiness. We depend on POMCUS to expedite the arrival and combat preparation of units. And we have manned and equipped our forces at peacetime authorization levels, a practice which makes mandatory a quick augmentation in time of crisis.

These practices and their associated risks must be weighed against the steadily growing power of the Soviet Union. The relentless improvement of the Soviet and other Warsaw Pact forces has caused the relative power gap between NATO and Warsaw Pact to widen. Risks which were acceptable when our force decisions were made in the past may no longer be prudent.

There are initiatives which we might undertake to increase our capabilities and to minimize risks.

I mention that we are manned at our peacetime authorizations, i.e., something less than our wartime needs. Any increase in manning levels will contribute to combat power sustainability, but such increases are not programmed and can be attained only at the expense of other Army commands or by an increase in the overall end-strength of the Army.

We will face the problem of borrowing soldiers from their training to perform peace time housekeeping activities. The 5,300 civilian hire spaces solved more than half of our problem, and this year we expect to civilianize 2,300 additional spaces that currently divert military manpower. This will leave us with about 800 such spaces still filled by soldiers.

MANPOWER TRAINING PROGRESS

Within our manpower authorization we continue to have imbalances among noncommissioned officers and specialist technicians. The only real solution to this problem and to the new challenge of training soldiers to operate and maintain new equipment, introducing them to the right unit at the right time, is the adequate funding of our training base, the Army NCO education system and the introduction of reenlistment and career-attracting incentives.

A well-trained force is imperative for reducing the risks described earlier. There is no question that the soldiers and units of U.S. Army, Europe are well trained. All measurable or quantifiable factors attest to this. Nevertheless, the force could and should be trained better. Training progress is hindered by limited ammunition allowances and a lack of sufficient training areas and modern facilities and ranges. We have an immediate need of training devices and simulators and the range and training area improvements which we have programmed for the coming years.

The Congress has directed that we seek NATO funding for these improvements, and we have done so, but there are no NATO funds available and no NATO responsibility for providing training facilities of this nature. For those reasons I ask that Congress reconsider this need and authorize the funds that we must have to improve adequate combat preparedness training for our soldiers.

FORCE MODERNIZATION

Force modernization, which is an essential for reducing risk, is underway in Europe. The M-1 Abrams tank is being issued and the 3d Battalion, 64th Armor of the 3d Infantry Division is now training with the Abrams at Grafenwoehr. We have established a very professional transition program for those units, and we are pleased that the officers, NCO's, and soldiers are most enthused about their new tank, satisfied that they really do have the finest tank in the world. I have with me a Stars and Stripes article which addresses this transition which you may wish to insert in the Congressional Record.

We have begun to receive the AH-1S Cobra attack helicopter, another item which enjoys great troop acceptance and confidence and which adds significantly to our tank-killing capability. In 1983 we expect to receive the first M-2, M-3 Bradley fighting vehicles which will provide compatible maneuverability for both elements of the infantry-armor combined arms teams.

Modernization is also improving our structure. Last year two more divisional combat electronic warfare intelligence battalions were activated, and our ability at division level to find targets and produce intelligence will be improved because of this.

A deep look capability is vital in Europe, and we still need systems which can find, track, and target the enemy's forces in depth. Last year I reported to you that USAREUR is well-equipped, well-maintained and adequately supported by the logistic system. Modernization is essential, but equipping the command totally, to include especially our war reserves and POMCUS stocks, even with rebuilt models of old equipment, is just as important, and in fact is a critical readiness issue. Requests for such equipment are also included in this year's budget submission.

WARTIME FORCE SUSTAINMENT

USAREUR's greatest problem in wartime will be sustainment of the force. Weakness in sustainment is not related to the quality of the forces in Europe, which are ready and capable, but to several other causes. The support force structure is weak; some equipment shortages exist in POMCUS; some logistics units already in Europe are manned and equipped at authorization levels so low that they cannot attain combat readiness; and other support units that will reinforce from the United States must come by sea. A host nation support agreement to be signed this year with the German Government will eventually make up some of our lack of logistics force structure, but the problem will not be fully solved unless we make a fundamental commitment of additional resources to logistics.

When I spoke to you last year I indicated that the greatest concern of commanders in Europe was the appalling living and working conditions that many of our soldiers must endure. These conditions remain a vital concern, not only because there is a clear responsiblity here to provide properly for soldiers and their families, but also because there is a clear connection between living and working conditions and readiness.

MAINTENANCE AND REPAIR BACKLOG

The support we received in fiscal year 1982 to attack the maintenance backlog in our barracks and soldier work areas provided tangible evidence to the command that improvements are happening. But our facilities problems did not crop up overnight and they will not be corrected overnight. Our backlog of maintenance and repair is still $1.37 billion, and only sustained funding through the eighties will attain a reasonable standard.

Family housing continues to be our most serious peacetime problem, and we have not made noticeable headway. Three years after I first identified family housing as our primary problem area, I am asking today that you approve a fiscal year 1982 family housing management account supplemental to provide the maintenance funds that are absolutely essential for this year's operations.

Beyond the need for maintenance and repair, the continuing lack of the numbers of sets of quarters required for our forces relegates thousands of families each year to waiting lists, some of which require a wait for more than a year. Many soldiers do not bring their families, choosing instead an unaccompanied 2-year tour. Your favorable action on increased leasing authority and a small construction program will allow us to make a modest overall improvement.

EUROPE'S MASTER RESTATIONING PLAN [MRP]

The Congress has been aware for over 2 years of U.S. Army, Europe's Master Restationing Plan (MRP). Unfortunately, Congress has restricted our ability to construct any of the facilities asssociated with this plan, requiring instead that we obtain NATO or German funding. We have requested negotiations with the Federal Republic of Germany on cost sharing for the MRP, but we have made little progress thus far, although we have our first meeting scheduled for March of this year.

Meanwhile, I assure you that our requests for construction in fiscal years 1982 and 1983 are essential for modernization and are appropriate even if we never execute the MRP. We will continue to abide by the Congress intent, but it has long been apparent that there is not enough room in our current facilities to accommodate the modernization we have programed. We must build somewhere and the locations selected are those most appropriate for new structure and new equipment.

I reported last year that the Army in Europe was a ready force. We continue to be a ready force this year, a force of high quality, well trained, and properly motivated soldiers. We hope we have made progress through improved leadership, training, management, and the incorporation of the new equipment which has been provided. But we remain a long way from providing the fully adequate training, the first class facilities, and the total environment which approximately 400,000 soldiers, U.S. civilians, and family members in Europe deserve.

In January of this year, a German radio network conducted a series of interviews with American soldiers concerning their duty in Europe. Listening to their interviews it becomes abundantly clear that despite the visible improvements of 1981 and the promise for 1982, soldiers who live in the barracks do not want to be in Germany, and soldiers whose families do not have Government furnished quarters do not want to be in Germany.

The more senior soldiers, noncommissioned officers and officers reveal a marked satisfaction, even enthusiasm for their assignments, an enthusiasm that grows directly with the grade structure and their eligibility for housing. Service in Europe still does not have a proper acceptance among soldiers; too many still try to avoid such service, too many leave their families at home. We are doing better, but not enough and not fast enough.

READINESS STANDARDS

We have a good Army in Europe. It meets readiness standards as well or better than our peacetime Armies of the past. It enjoys the priorities appropriate for a deployed force in a potential combat theater. But it is an Army which has not been supported adequately in the past, which can and should be better than it is. It is faced with formidable tasks and obstacles which are associated with programs to modernize equipment, force structure, facilities and stationing. My understanding of the 1983 budget is that it represents a modest progress for meeting those tasks and overcoming the obstacles.

Sir, I will be followed by General Wickham, who will make his opening remarks.

Senator **Humphrey**. Very well. Let me first welcome my colleague and the ranking member of the subcommittee, Senator Levin. Do you have an opening statement, Senator Levin?

Senator **Levin**. Yes, I do. Thank you, Mr. Chairman.

Mr. Chairman, since this is the first hearing of the subcommittee on the fiscal year 1983 defense budget, I want to take a few minutes to outline some of my concerns about this budget and to indicate the kinds of questions I think should be asked and I will be asking over the course of these hearings.

First of all, I want to thank the chairman for his usual courtesies and to commend him for his tremendous commitment to this area, which is so critical to our defense. I happen to believe that the budget is out of balance in two important ways:

First, if you look at the proposed defense budget in the context of our economy and in the context of what we propose to spend on domestic programs, I am forced to conclude that it distorts our national needs and priorities. To achieve a $91.5 billion deficit, which is more realistically a $130 billion deficit, we have slashed domestic spending, reducing it by roughly 22 percent in most areas. Yet, at the same time we are increasing defense spending by 19 percent. Those kinds of figures do not make sense, even if one uses the new math.

Second, and perhaps more significant for these hearings, I believe the defense budget is internally out of balance. Look, for example, at the way we are spending money on procurement. Overall procurement accounts increase by 28 percent in this budget, by 18 percent in the Army budget. At the same time operation and maintenance accounts, the accounts which determine the readiness and sustainability of our combat forces, grow by only 6 percent overall and by only 3 percent within the Army.

On its face, I think those trends are disturbing, and those trends are going to get worse in the outyears. Those procurement increases represent downpayments on major defense weapons systems, and as we make those downpayments we also make commitments, presumably, to see the systems through. We are in essence creating military procurement entitlement programs, programs which will increasingly result in higher and higher percentages of the defense budget being uncontrolled.

For an administration which has complained about the impact of domestic entitlement programs and domestic spending to turn around and create military procurement entitlement programs of the kind and vast scale suggested by this is nothing short of amazing. It's nothing short of being destructive, ultimately, to our military posture.

In the near future these entitlements, these procurement entitlements, will take more and more of our defense spending, leaving less and less for the critical operation and maintenance accounts. We cannot afford to cheat operation and maintenance, and that means we cannot afford these procurement entitlements, either militarily or economically.

Mr. Chairman, we must reduce the increases in the defense budget and we must specifically focus on reducing the huge increases in procurement if we are going to preserve our ability to meet critical operation and maintenance needs of the future. Reductions in these increases in procurement now will allow us to meet our operation and maintenance needs in the future and they will also contribute to reductions in the deficit.

Finally, Mr. Chairman, I would also indicate that there are other ways in which we can achieve real savings. Our allies, for example, have got to contribute more, and if those whom we seek jointly to defend are unwilling to join in that effort, then we must reevaluate how and where we spend our defense dollar.

In addition, we must also evaluate the relationship between expenditures and effects. Since 1980, fiscal year 1980, we have increased defense spending by 80 percent. Yet in fiscal year 1983 less than three-fifths of our Navy and Marine Corps fighter aircraft are projected to be mission capable, and the average number of steaming days per quarter for our Navy will actually be reduced from fiscal year 1982 levels.

We all know that throwing money at a problem does not improve conditions. But I think the services have an obligation and an important responsibility to show us and to show the public where the extra dollars that we put in readiness actually have an effect on readiness. I think that will make our case a lot easier as we try to defend these readiness accounts and in many cases to increase these readiness accounts, if the service will demonstrate how dollars spent on readiness actually have an effect on readiness.

As I said, there will be areas where we should increase and some where we should decrease in the O. & M. accounts. But basically I believe we must protect those accounts, protect them from being raided in the outyears by a growing commitment to procurement programs which carve out large chunks of the defense budget.

We must focus a lot of our time, not just as a subcommittee, because this is not our primary function, but as members of the committee, on procurement, on cutting procurement back from the proposed large increases, so we can strengthen operation and maintenance and so we can find the savings we need to reduce the deficit and strengthen the economy.

Again I thank the Chair for interrupting the flow of the presentation of the statements. I hope it has not been too long an interruption. Again I want to commend the Chair for his dedication to readiness. It is always a struggle between how much we are going to put into new weapons systems and how much we will expend to keep our present weaponry and personnel ready.

This subcommittee has a particular interest and belief in readiness, in operation and maintenance, and in conventional strength, and I hope we will continue to move in that direction as this year progresses.

Senator HUMPHREY. Thank you, Senator Levin. I wholeheartedly agree with your remarks about the need to deflect the usual attacks on the O. & M. accounts in order to promote readiness.

We will go back now to the witnesses. General Wickham, may we have your statement?

[The prepared statement of General Wickham follows:]

PREPARED STATEMENT OF GEN. JOHN A. WICKHAM, JR., COMMANDING GENERAL, 8TH U.S. ARMY

Mr. Chairman, members of the committee, thank you for the opportunity to provide a statement concerning the preparedness of the Eighth United States Army (EUSA). Stationed in the Republic of Korea (ROK), EUSA is a part of those US forces which comprise a multiservice capability for deterrence or conduct of defensive operations in concert with ROK Armed Forces—all under the operational control of the ROK/US Combined Forces Command (CFC) during crisis periods.

STRATEGIC

As you know, the republic of Korea rests on the Northern flank of an arc of noncommunist nations stretching from Japan, and the Philippines, to the five-member association of South-East Asian Nations (ASEAN). Thus, for geostrategic reasons, the ROK is an element of vital US Western Pacific security interests. It also represents one of the "hot spots" in the world. [Deleted.]

THREAT

[Deleted.]

The past two years have seen an accelerated deployment of more mobile ground weapons systems and repeated rehearsal of the rapid deployment of strategic forces from the the rear areas to forward assembly areas from which an all-out attack could be launched with little additional preparation. [Deleted.]

[Deleted.] The combination of all these factors—together with the ominous tone of urgent demands for unification in North Korean propaganda—give us cause for concern for the prospects for peace on the peninsula.

FORCES OF DETERRENCE

[Deleted.]

Within this overall joint context, the following assessment details the EUSA readiness status:

MANPOWER/STRUCTURE

EUSA presently consists of the 2d Infantry Division, 19th Support Command, supporting aviation and engineer groups, and varied smaller combat support and combat service support units. The total personnel strength approximates 25,000. Supporting these forces are over 3,000 personnel of other MACOM's (1st Signal Brigade of the US Army Communications Command (USACC), the 501st Military Intelligence Group of US Army Intelligence Command (INSCOM), and Joint United States Military Assistance Group—Korea). [Deleted.]

[Deleted.] EUSA strength is programed to be near 100 percent of authorized through July 1982. Within an overall excellent personnel readiness posture, there have been periodic shortfalls in some hard skill specialities and grades. These shortages generally reflect worldwide army shortages and, overall, are consistent with our fair share of available assets.

EUSA manpower authorization levels generally support day-to-day peacetime operations.

[Deleted.]

TRAINING

All EUSA units have achieved and maintained a training readiness commensurate with their authorized level of organization for the past year. The EUSA training program is tough and challenging for both soldiers and commanders, and is enhanced by facing an actual enemy threat. It is designed to prepare the command physically and mentally to defeat a determined enemy under spartan conditions in the rugged terrain of Korea. [Deleted.] ROK-US standardization and interoperability are emphasized through a planned series of joint and combined training exercises. Team Spirit, the major field training exercise conducted by CFC, provides the opportunity to integrate national and multiservice capabilities, and practice the full range of combined arms operations. [Deleted.]

Training ammunition is adequate with careful management. The command conducts an intensive qualification and combined arms live firing program to override the turbulence caused by one-year tour rotation. A major effort is underway to increase the availability and use of training devices, simulators and subcaliber systems. Emphasis on these systems is designed to reduce use of high cost training ammunition and improve proficiency by affording additional training opportunity using these devices.

Other programs/initiatives requiring attention include improvement of individual/unit NBC defense capability, improvement of existing training areas and ranges, construction of new training facilities, and improvement of tactical and nontactical ADP systems. NBC defense improvement is essential to reduce unacceptable casualties, increase tactical capabilities, and assure combat support/combat service support operations in an NBC environment. Training areas and ranges need to be upgraded to accommodate new weapons/training support systems which require larger areas due to increased weapon capabilities. Existing ADP equipment must be replaced with the latest state-of-the-art equipment.

Maintaining the command's high level of training readiness is dependent upon adequate OMA funding to support the tempo of training programs. Adequate OMA funding is necessary for joint and combined exercises, such as Team Spirit; otherwise, increasing airlift and travel costs could constrain our ability to maximize the opportunity to practice and evaluate standardization and interoperability.

LOGISTICAL READINESS

Logistics readiness is the key to combat readiness. [Deleted.]

[Deleted.] For the long term, the solution is replacement and/or modernization of overage equipment.

[Deleted.]

Accelerated delivery of many items is desirable, but, of course, is dependent upon overall funding support levels for the total Army. Of particular interest to EUSA are modern communications equipment, combat vehicles, advanced helicopters, and electronic warfare and target acquisition systems. Continued Congressional support for these programs will contribute importantly to improving combat effectiveness and readiness of EUSA.

SUSTAINABILITY—WAR RESERVES

[Deleted.]

[Deleted.] Any real success in this critical area is dependent upon Army-wide resource levels and Congressional support.

WAR SUPPORT PROGRAMS

Closely associated with readiness and the capability to sustain peacetime and wartime missions are EUSA war support programs that have been formulated to enhance command readiness for war. Two central areas with identified deficiencies are Command, Control, Communications and Intelligence (C3I) and War Reserve Stocks for Allies (WRSA).

[Deleted.]

Required improvements in EUSA tactical intelligence capabilities are associated closely with theater-level C3I systems.

[Deleted.]

OTHER PROGRAMS

Three additional areas—economics and efficiencies, quality of life, and the combined defense improvement projects (CDIP) program round out the EUSA picture.

EUSA aggressively pursues measures for cost cutting and savings. Three installations have been returned to the ROKG resulting in O&M savings of $1.8M. Savings of $1M were realized through reduced TDY costs in 1981. A 20 percent decrease in security lighting costs was accomplished, increasing annual savings from $281K to $490K with potential savings of $31M over the next five years. A program to burn used oil for heating has saved $45K and amortized the initial investment, with a potential for saving $300K annually. EUSA exceeded HQDA energy conservation goals for FY 81 with reductions of over 12 percent in both facilities and mobility energy consumption—this is nearly double the Army goal. Ongoing studies may enable EUSA to save another million dollars in energy costs.

Programs for upgrading human resources and quality of life are essential to maintain the force. Substandard, deteriorated, energy wasting, overaged and disgraceful facilities and utilities [deleted] are in need of upgrade or replacement. Retention of available government owned and leased family housing, and funding to obtain additional leased housing are needed to enhance efficiency and continuity of operations provided by personnel serving a two-year tour. Improvement of quality of life is critical to increasing acceptance of longer tours in EUSA and reducing the turbulence associated with tours of twelve months. OSHA surveys indicate improvements in health and safety aspects of the work environment are in need of immediate funding. Substandard conditions in 300 identified areas preclude total compliance with federal law and increase the possibility of accidents and injuries. Improved civilian recruitment is necessary to obtain authorized manpower required for implementation of installation support, peacetime training/readiness/logistics operations, support of early combat operations, and reception of augmentation forces. [Deleted.]

Host Nation Support (HNS), known in Korea as the combined defense improvement projects (CDIP) program, is a vital and expanding effort. The positive support of our forces by ROKG is among the best by any ally and is vividly demonstrated in significant contributions to the HNS/CDIP program. The US realizes annual recurring cost avoidance of almost $800M by ROKG support of the US forces through projects such as the KATUSA and Korean Service Corps (KSC) programs, and performance of ammunition service and transportation functions. Force structure savings are 5,000 personnel (27 company sized unit equivalents). This is in addition to the KATUSA augmentees. Additional benefits are: waiver of value added taxes, preferred electricity rates, and lease free real estate. Over $11M of these recurring savings directly affects the individual service member. Worthy of note, is the newly initiated "Reunion in Korea" program which has been received enthusiastically and provided a significant morale enhancing opportunity for family members to visit Korea at greatly reduced air and accommodation rates.

The ROKG already has contributed $225M to warfighting projects since the CDIP program was formulized in 1980. Projected expenditures between 1982-87 are approximately $470M despite continuing ROK economic difficulties. Programmed expenditures in 1982 alone are $140M. These expenditures enhance such essential projects as POL storage/distribution, command and control facilities, and force stationing improvements. The annual CDIP program review now underway will request ROKG contributions, over the next five years, be increased to $700M. In addition to the warfighting construction efforts, the ROKG continues the project of building 1100 family housing units for US forces personnel at a cost of $61M. This housing is leased to US forces at or below operating costs. Through quid pro quo construction under the status of forces agreement, the ROK invested $25M for completion of two major projects in 1981—the trans-Korea pipeline (POL) extension and a new port facility.

Uppermost in our continuing priority efforts is the identification of existing and potential combat support/combat service support offsets to the US forces wartime requirements that save critical US strategic lift assets. At issue is the air/sealift capacity to move augmentation forces and large amounts of bulk stocks simultaneously during the critical early days of any war on the Korean peninsula. ROKG commitments to support our wartime requirements in ammunition service, transportation, labor service, and other support areas eliminate the need to deploy 39,000 support personnel (182 company sized units) which translates into an airlift avoidance of more than 250 C141 of personnel airlift sorties and a sealift avoidance of 64,000 short tons of unit equipment. Annual recurring savings to the US of approximately $950M will be realized from these offsets in a contingency. Additionally, recently signed agreements commit ROKG air and sea assets to augment US strategic lift during contingencies.

Potential wartime offsets continue to be explored to further reduce US augmentation and strategic lift requirements for Korea. The ROKG has unquestionably demonstrated through CDIP and other construction programs, its strong support of the US commitment. The ROK is a staunch US ally and sets the example for others. They have earned our continued cooperation and strong support.

CONCLUSION

[Deleted.]

It is imperative that Congress approve complementary levels of funding so we may obtain, operate and maintain hardware, materiel, and force structure enhancements as cohesive, sustainable, readiness improvements.

In summary, I have highlighted the requirements for [deleted].

STATEMENT OF GEN. JOHN A. WICKHAM, JR., COMMANDING GENERAL, 8TH U.S. ARMY

General **Wickham**. Thank you, Mr. Chairman, Senator Levin. It is an opportunity which I welcome to discuss the preparedness of the 8th Army. Let me summarize my detailed statement which you have placed in the record.

As you know, the 8th Army is a part of the joint U.S. forces which comprise a capability to deter war or to conduct military operations with the Republic of Korea Armed Forces. The importance of maintaining peace in that world needs no elaboration before this subcommittee.

To deal with this threat the principal military headquarters is the ROK-U.S. Combined Forces Command, which has under its control over one-half million armed forces in peacetime. Our mission is to deter war and, should deterrence fail, to defeat North Korean aggresson. And I am confident we can do that.

The 8th Army has the mission of providing combat and combat support forces to the Combined Forces Command. It also has the responsibility of providing the significant command, control and communications capabilities which are necessary. One of our wartime tasks is to receive augmentation forces and prepare them to fight, pass operational control to CFC, and then provide the full range of required support.

FORCE READINESS

Naturally, our highest priority involves improvement of force readiness. As Senator Levin suggested, this requires that units be trained to the highest standards and equipped with the best possible equipment maintained at peak condition. The Army's readiness system measures this. In addition, frequent and rigorous operational training, to include live fire exercises and extensive joint/combined exercises, develops combat skills and interoperability.

Over the past year, U.S. strength has ranged between 96 and 100 percent and is programed to be near 100 percent in July of this year. Some periodic shortfalls have existed in hard skills and grades, but these shortages generally reflect worldwide Army shortages and overall are consistent with our fair share. The U.S. Army has a system for prioritizing distribution of resources and forward deployed sources receive priority over those in the United States.

All 8th Army units last year maintained a training readiness level commensurate with their authorized level of organization. Our training program is tough and challenging, and is enhanced not only by facing a threat but also by excellent training opportunities, probably among the best in the world.

Logistics readiness is also important for combat readiness. Improvements with theater war reserve stockage for U.S. and allied forces must continue to be supported. Also, we must upgrade essential logistics facilities to sustain both inplace and augmentation forces. New petroleum oil lubricants (POL) facilities must be built and existing ones hardened. Modern maintenance and storage facilities to improve organic support capability are needed to meet wartime requirements and upgrade the work environment for our soldiers. Nevertheless, despite these shortages, the mission capable rates of most equipment generally have exceeded Department of Army averages.

Due to geography and limited air/sealift capability, the sustainability of our forces in Korea is crucial.

Programs to improve our sustaining capabilities must continue to be supported as they are in the current budget request and have been in previous ones.

WAR SUPPORT PROGRAMS

Closely associated with readiness and the capability to sustain peacetime and wartime missions are the 8th Army's war support programs.

As you know, the 8th Army manages and monitors the WRSA program. The program includes major equipment, ammunition, packaged POL and repair parts.

The North Koreans are as close to Seoul as Dulles Airport is to Washington.

Programs for upgrading the quality of life for our forces, as General Kroesen mentioned, are essential for morale and retention. Deterioration, energy wasting, disgraceful facilities and utilities are in need of upgrade or replacement. About 48 percent of our soldiers are living in Korean war vintage housing in Korea.

The 1982 budget provides for some upgrading and the fiscal year 1983 budget request would continue the improvement. Funding to continue leasing of ROK-built family housing also is needed to enhance efficiency and continuity of operations provided by personnel serving a 2-year tour in Korea.

Host national support, known in Korea as the combined defense improvement projects program, is an expanding and important effort. The positive support of our forces by the Republic of Korea Government ranks among the best of any U.S. ally, and I can elaborate on that during questioning. I think it is a remarkable story.

In summary, I have highlighted the requirements for developing our capabilities to maintain peace and stability in Korea. The U.S. forces, in concert with our strong and reliable ROK ally, will continue to assure deterrence by being absolutely ready for war.

Thank you very Much.

Senator **Humphrey**. Thank you, General Wickham.

General Ross.

[The prepared statement of General Ross follows:]

Prepared Statement of Lt. Gen. M. C. Ross, Deputy Commanding General, U.S. Army Forces Command

It is my pleasure to appear before this subcommittee of the Senate Armed Services Committee relative to the readiness of FORSCOM. My comments will be directed first to our mission; second, to our structure for doing our job; and last, but most important, to the state of readiness of the units and installations that make up the United States Army Forces Command.

FORSCOM is the largest command subordinate to Headquarters, Department of the Army and commands all Active Army and Army Reserve troop units in the Continental United States, Alaska, Panama and Puerto Rico. Upon mobilization, the Army National Guard joins our ranks. Our primary mission is preparing Army forces for mobilization and deployment. The most important task that we have is to ensure that our combat and supporting forces are ready to fulfill their contingency responsibilities on short notice. The largest of these contingencies is the mission to reinforce NATO. Nearly all FORSCOM units are earmarked for this task. For example, [deleted].

But there are contingencies in other theaters, therefore, many of our units are also prepared to reinforce Korea, Alaska, Panama and the Caribbean. In addition, FORSCOM provides the Army units which make up the great majority of land combat power available to the Rapid Deployment Force for contingencies in the Southwest Asia (Persia Gulf) area. It should be understood that because of these other contingencies, virtually all of our units plan not only for NATO, but for employment elsewhere. Any RDF employment or commitment of forces in any other theater would require the use of units earmarked for NATO. However, with minor exceptions, it is the NATO contingency which forms the basis for the size (or structure) of the force; and, it is the NATO contingency which dictates a specific place in the force structure for all of our units, both Active and Reserve Component.

FORCES

Regarding our force structure, there are two dimensions to the business of building a go-to-war force. The first is deciding the number and type units necessary to get the job done. The Army is very good at this task. The Army has the techniques for assessing those factors that determine how we should be organized. Within the constraints of affordability, the present and projected FORSCOM structure provides an adequate base for reinforcing the overseas commands. However, mobilization to reinforce NATO is but a preamble to total mobilization that generates a new set of requirements. Total mobilization, which can be compared somewhat with the WWII effort, visualizes the need for new divisions, plus the headquarters elements necessary for command and control, and combat and combat service support elements necessary to sustain the force. The other dimension of having a go-to-war force is being able to resource it, both tactically and strategically:

Tactically, in terms of people and equipment to put in the units.

Strategically, in terms of airplanes and ships to project and sustain the force.

[Deleted.]

In determining the readiness status of Army units in FORSCOM, we use data obtained primarily from unit status reports (USR). This is the principal managment tool used by the Services to measure unit status and it is submitted monthly by all Active Component units at battalion and separate company level. It is aggregated at higher levels and submitted by FORSCOM to Department of the Army and the Joint Chiefs of Staff. Army Reserve and Army National Guard units submit the same USR but at longer intervals (six and three months, respectively). It is useful to have a common understanding of not only the terms used and the standard against which readiness is measured but also, to understand the limitations of our readiness measurements.

The terms used are Equipment, People, Training.

The standards against which we measure are the documented force structure. A mobilization scenario which requires execution of the contingency to reinforce NATO.

The limitations are: The reports do not tell us if we can effectively execute contingency plans. They do not project the status of units at the time they are scheduled to deploy.

In all cases, status is reported in C-ratings which have the following meaning: C-1 Fully combat ready; C-2 Combat ready with minor deficiencies; C-3 Combat ready with major deficiencies; and C-4 Not combat ready.

The following charts summarize the personnel and equipment condition of wartime FORSCOM units as reported in the latest USR.

CHART 1. ACTIVE COMPONENT DIVISIONS

[Deleted.]

CHART 2. ARNG ROUNDOUT BRIGADES

[Deleted.]

CHART 3. ARNG DIVISIONS

[Deleted.]

CHART 4. ACTIVE COMPONENT NONDIVISIONAL UNITS

[Deleted.]

CHART 5. ARNG NONMAJOR UNITS

[Deleted.]

CHART 6. USAR NONMAJOR UNITS

[Deleted.]

As indicated earlier, C-ratings are an imperfect measure of readiness, but they do provide useful personnel and equipment management information. By themselves, they do not tell us our capability to redistribute personnel and equipment in order to meet deployment times; nor, do they predict when assets will be exhausted. The significance of these data is that many of the units which are not at C-1 are in fact at the highest level at which FORSCOM is able to resource them.

[Deleted.]

There is another effect of manpower spaces and equipment constraints. Specifically, [Deleted].

We recognize that not all units will leave on the first plane or ship. Our task is to manage the projected status of units at the time they load for movement to the overseas theater. This is a complex process. And, because we deal with ever-changing data, it is an all consuming and continuous task. It requires planning for the use of retirees and members of the Individual Ready Reserve (IRR) who will not only fill vacancies at our mobilization stations and training centers, but also join the ranks of deploying units. It requires the rapid recovery and redistribution of equipment that will be left behind by units flying overseas that will be drawing prepositioned sets of unit equipment (POMCUS).

We have made significant progress in our ability to automate the process of matching the needs of our units with the assets which are available or which will become available. As our level of sophistication grows, so does our ability to recognize the magnitude of the problem.

EQUIPMENT

[Deleted.]

This served to reduce strategic transportation requirements for early deploying units but compounded our problem in equipping those that deploy later. Second, in most categories of equipment, the Army has not procured enough material to equip the force. From FORSCOM assets, we must provide euipment for our units for combat, repalcement equipment for the combat theater, and equipment for the training base so that it can do its job of training individual soldiers.

[Deleted.]

CHART 7. RDF-A Mission Essential Equipment Requirements

[Deleted.]

NOTE.—LIN (Line Item Number) identifies the kind of equipment; each LIN may contain many items.

CHART 8. FORSCOM Selected Equipment Shortfall (NATO Contingency)

[Deleted.]

Our ability to sustain a deployed force is further degraded by a shortfall in the number of required logistical support units. The magnitude of this is shown below.

CHART 9

[Deleted.]

Not all is negative. I am pleased to report that in some areas we have made improvement. [Deleted.]

PERSONNEL

Turning now to the people needed to man the force. The dramatic successes in the build-up of the unit strength of the Army Guard and Reserve troop units continued in the past year. In calendar year 1981, the strength of these units increased by 37,829, mirroring the previous year's increases. Once again recruiting was successful but, more importantly for the long term, our retention efforts were rewarded by a marked improvement in retention figures.

One way we have of increasing USAR unit readiness is to increase the number of people serving full-time with our USAR units. We have recommended to Headquarters, Department of the Army that our full-time force be increased from its present

4.5% of authorized unit strength to 7.2% by the end of FY 84. While this would still leave us far short of the full-time support provided to Reserve units of the Air Force, Navy, and Marine Corps, it would provide all USAR units with a realistic base level of support and provide a springboard for future growth. We will then be able to accelerate the targeting of additional resources to critical, high priority, early deploying units. This additional level of full-time support is the cornerstone of any support package that we provide for the USAR.

From the perspective of preparedness, we must remember that peacetime authorizations for our units, AC and RC alike, do not equate to wartime or full requirements for manning. The following chart reflects that difference:

CHART 10

	End fiscal year 1982 Auth	ASGD	End fiscal year 1982 RQMTS	ASGD/RQR (percent)
FORSCOM AC (15 Jan 82)	279,303	272,674	304,968	89.4
USAR (31 Dec 81)	257,153	223,561	287,478	77.8
ARNG (31 Dec 81)	426,694	394,961	445,096	88.7
Total	963,150	891,196	1,037,542	85.9

The focus of the Active Component reenlistment program has been shifted from one which emphasizes quantity to one in which quality is the primary factor. We can now afford to screen out, at the point of reenlistment, those service members who have not shown the potential to become strong NCOs. Furthermore, early indications are that the recent changes in reenlistment policy are influencing MOS changes of personnel in order to better match Army-wide requirements.

The NCO picture is much more positive than it was a year ago. Overall, the FORSCOM NCO strength reached 96 percent of authorizations in December 1981, up 7 percent from the preceding December. Moreover, the posture of NCO manning in combat battalions throughout FORSCOM has improved 8 percent in CY 1981 to 89 percent—the highest level since the early 1970s, shortly after the end of Vietnam hostilities. The challenge of retaining sufficient Combat Arms NCOs to lead our infantry squads and artillery crews and to command our tanks still remains. Nevertheless, the figures show that we are succeeding. The similarity of increases in NCO strength overall and within the combat arms demonstrates that DA programs aimed at recruiting quality personnel and retaining them are working. Without Congressional support of these programs, this positive trend would not have developed.

We must now focus on methods to continue these trends. One such method is to improve the quality of life programs in our military communities. In recent years we have improved bachelor housing for enlisted personnel, but we still have soldiers living and working in buildings that have long surpassed their life expectancy. We need additional funds to construct new work, living, and recreational facilities to replace the substandard buildings that can no longer be repaired economically. Among the most critically needed facilities that impact on individual and family quality of life are troop barracks, family housing, physical fitness complexes, and child care centers. In the all volunteer force within FORSCOM, we find that about one-half of our soldiers are married. Our obligation to the distaff side of the force cannot be ignored. Our facilities and programs have not kept pace with increased user demands. Health care needs to be upgraded. The medical support provided outside of military medicine in the form of CHAMPUS often results in a financial penalty to military sponsors. In many cases the CHAMPUS payment does not offset the actual cost and even when it does, soldiers are often required to wait for reimbursement long after they had to meet their obligation to the provider of medical service.

These quality of life facilities and programs are essential to our objective of providing for the basic needs of our soldiers and their families. We are confident that we can continue to retain qualified and motivated personnel provided that we satisfy the needs of our soldiers and their families. Coupled with our expectation that our soldiers endure the rigors of military life is their right to expect that we, their leaders, will provide them with an environment in which to live and rear their families that is equivalent to that of the American society. A decison to remain in the Army should not require acceptance of the status of a second-class citizen.

One other personnel issue that concerns me is the continuing civilian shorfall in our General Support forces. At the beginning of FY 82, the deficit in FORSCOM full-time permanent (FTP) civilian allocations approximated 11,000 spaces. Recent guidance which provides for further reductions in TDA allocations has exacerbated this situation. We expect this figure to grow to 13,000 by end of FY 82.

The fact that a severe staffing deficit continues to exist in our base operations support area is evidence that the problem has not been addressed in its totality. A continuing civilian shortfall of the current magnitude results in a diversion of soldiers to base operations (BASOPS) functions in order to get the job done. Aggressive use of civilian spaces recently authorized to reduce some Borrowed Military Manpower (BMM) has allowed for the return of approximately 2,000 soldiers to their units, thus enhancing the combat readiness posture of FORSCOM. Nevertheless, we still use more than 6,000 soldiers on a daily basis to offset the civilian shortfall which remains and at least 3,400 of these could be replaced by civilians.

In the short term, civilian staffing shortages can best be assessed as a negative factor which precipitates crisis management within the sustaining base thus adversely impacting upon readiness. This shortfall also seriouly impedes our capability to mobilize. The result is that BASOPS support is curtailed, deferred, or accomplished with marginally skilled soldiers at the expense of both individual and unit readiness.

Borrowed military manpower is but a symptom of chronic end strength shortages which will not go away until the civilian shortfall is eliminated.

TRAINING

I will now discuss our training status. If we fight outnumbered and without a qualitative edge in equipment, training becomes all important. In FORSCOM, our training job is never done. In peacetime, we serve as the rotational base from which individual replacements are sent to forward deployed units. As long as the forward deployed force is different in size when compared to the sustaining base we can attain but a nominal level of training readiness due to personnel turblence. The personnel turnover and turbulence dictate that we continually back-track and repeat some training in order to improve team performance. The COHORT (Cohesion, Operational Readiness and Training) Program in which soldiers are trained and stay together as a company through their first enlistment will do much to reduce this turbulence. Many of these training events are resource intensive. FORSCOM is also charged with command and control of the Army Reserve and training supervision of the Army National Guard. While not part of the rotational base, these units provide the essential support and reinforcement during wartime. Personnel turnover and turbulence, while due to different causes, have the same effect in our Reserve units. These units must compete for the same resources in order to train, retrain, and maintain the skills necessary to rapidly support our forward deployed forces on mobilization.

We have a variety of tools to help us train more effectively. The primary reference in our training literature, The Soldier's Manual, contains all the skills pertinent to proficiency in each military occupational specialty and is issued to each soldier. These contain a detailed listing of all the tasks a soldier must master. These tasks are the end results of exhaustive research to determine exactly those things a soldier must know and be able to do to perform his job and survive in combat. Each task is stated as a specific training objective, stated in performance terms, which include the task, the conditions under which it is to be performed, and the standard to which it must be performed. These tasks permit our sergeants to quickly determine a soldier's proficiency and to identify skills which must be improved by additional training. The Skill Qualifications Test (SQT) is used to formally evaluate a soldier's ability to perform specific job related tasks. We do not fight as individuals, however, we fight as units and FORSCOM's business is building effective fighting units to go to war.

The standards for unit training proficiency are established in the Army Training and Evaluation Program (ARTEP). The ARTEP lists the critical, frequently performed combat missions that the units from squad to battalion level must be able to perform successfully under conditions that simulate, as closely as possible, combat conditions. Proficiency in individual skills listed in the soldier's manual support and is directly related to the accomplishment of the unit missions in the ARTEP.

The Army CAPSTONE Program has helped to identify a training strategy for the Reserve Component Commander. With knowledge of his wartime alignment and mission, an RC commander can prioritize unit ARTEP missions and Soldier's Manual tasks and use his limited training time to best advantage. Our Battalion Training Management System (BTMS), which provides a methodology for planning and organizing training within resources provided, has enabled our active units to make more effective use of the training day and our Reserve Component units to better use the limited training time available during weekend drill periods and the two week annual training periods. The culmination of individual training is unit training, which is evaluated on a frequent and recurring basis in the ARTEP for specific type/sized units. We save money and time by the use of simulations and subcaliber devices. Time is our most formidable opponent in training our Reserve Component force which can train only 38 days each year. We must maximize this training time to the fullest, using local, "home town" training areas mini-ranges and simulating to take best advantage of the one weekend a month available. Battle simulation centers, providing realistic settings for unit staffs, permit exercises and procedures to be developed and refined without the need for units to participate with troops in field exercises. Tank sub-caliber devices, used in conjunction with mini-ranges, permit tank crews to conduct gunnery drills and firing exercises maintaining proficiency without expensive movement to distant range facilities to conduct main gun engagements.

The Multiple Integrated Laser Engagement System (MILES), a new weapons engagement simulation, utilizes eye-safe laser beams and permits the realistic assessment of casualties during force-on-force maneuvers under realistic combat conditions. This system provides immediate feedback regarding casualties and equipment damage and indicates to individuals and units the success of their combat actions.

We will continue to benefit from these tools but our job is never done. The need for additional training funds is always present.

Training funds are used predominantly to replenish parts and supplies consumed during training, to buy fuel and to pay for transportation to and from distant training sites. In the nearly nine years of FORSCOM existence, available training funds have never met our full need. Units cope with resource shortfalls by adjusting training conditions in order to stay within funding constraints. Reserve Component units are particularly hampered since lack of funds often requires the unit to train at an inadequately resourced weekend training site rather than to provide those resources or travel an added distance to a well equipped training site. Other training conditions that are adjusted for both Active and Reserve Component units include the distance and duration of maneuver exercises, equipment density, and the number of participating units. Adjusting training conditions degrades training quality and effectiveness by reducing training intensity and realism. These degradations are things for which we have no objective measurement and herein lies the paradox of justifying training funds—units will continue to train regardless of how much money is received, but the training conducted may not be of the intensity and level of realism we feel is required to make them fully ready to fight and win. Unlike the objective measurements of readiness for personnel and equipment contained in the unit status report, training readiness is the result of the subjective professional judgment of the commander involved in assigning the rating. In addition, we employ special training assistance and assessment teams which assist our units in producing better training, by providing a cross fertilization of good training ideas and assessing the effectiveness of our training, the training system and the various products and training devices which support individual and unit training. Command visits provide an additional opportunity to "feel the pulse" of the training environments of our units and the unit training status. Our unit training is better in many ways than it has ever been, but commanders are never satisfied that their units are sufficiently trained for immediate combat.

Our units need to periodically train in terrain and climate that approximate that in the areas for which they have contingency missions. The most critical are cold weather and desert environments. It is most important we continue the overseas training of our Reserve Component units and continue to expand this program which permits these units to exercise on the foreign terrain to which, on mobilization, they will be deployed on short notice. We do not have sufficient funds to regularly send our high priority contingency units to areas where this training can be accomplished as the transportation costs are extremely high. Utilization of cold weather training areas such as Fort McCoy, WI and Ft Drum, NY provides some opportunities for both AC and RC units but will not accommodate the volume of units which need to be rotated through this type of training. In addition to the environmental training itself, units gain great training benefits and experience from planning and executing these movements. Of equal importance is training in overseas areas to provide realistic, in-country training for early deploying RC units to prepare them to respond in extremely short notice to support overseas contingencies. This training continues to have a positive impact on both RC and AC units involved.

As we receive new equipment and weapons, we find that some of our training areas are inadequate to permit maneuver over the distances we will have to fight.

We find that many of our firing ranges are no longer adequate to accommodate the longer effective ranges of new weapons systems. This becomes more critical in light of the Total Force concept, which relies heavily upon early use/deployment of RC units during time of conflict. We need more than just training money to solve these problems. With your help, we are making satisfactory progress toward purchasing additional acreage in Colorado for use by the 4th Infantry Division. We anticipate first use of this new training area in October 1984. The Army will seek additional money to modernize and improve ranges, build training facilities to teach our soldiers how to fight in urban areas and to purchase simulation and subcaliber devices. We recognize that new facilities must be designed to make optimal use of available real estate. To accommodate training for the newer weapons systems, FORSCOM ranges will require extensive modernization and improvement. The cost of building an adequate multi-purpose range complex in today's dollars is $20 million. We will need 12 of these ranges by FY 88 for use by both Active and Reserve Component forces.

TRAINING AMMUNITION

Available funds for training ammunition are not keeping pace with rising ammunition costs. There are two reasons for this, but it is primarily the result of inflationary costs for existing ammunition items and significantly increased costs of ammunition for new weapons systems. The costs of Force Modernization are not only in terms of equipment, but also in ammunition to train crews and units with the new systems. For example, the Infantry Fighting Vehicle System (IFV) is a multi-weapons system which fires some totally new types of ammunition. It replaces a single weapon system (M113-Armored Personnel Carrier). When projected into the out years, FORSCOM training ammunition requirements go from $500 million in FY 83 to more than $1 billion in FY 87.

These costs have compelled us to re-examine requirements for ammunition. Ammunition is essential to support multiechelon training from individual and crew level qualifications to integration of all unit weapons into a realistic combined arms live fire training environment. This full spectrum is required to develop trained units. Within this framework we are energetically looking for more and better ways to use simulators and subcaliber devices, but we still must procure sufficient training ammunition to meet existing needs. The chart below shows types of ammunition in which there are severe shortages in FY 82 training ammunition allocations.

CHART 11.—*Fiscal year 1982 ammunition requirements (selected items)*

Item:	*Percent of RQMT Available*
0.50 cal. for tank machine guns	49
81 mm mortar illumination	51
165 mm demolition round for Cbt engr. veh.	37
2.75 inch rocket, high explosive (HE)	23
Light antitank weapons (LAW), HE	12
TOW (ground systems) antitank missile	50
DRAGON antitank missile	33

OPERATION AND MAINTENANCE FUNDING

Increased defense funding provided by the Congress in FY 1981 and FY 1982 has enabled FORSCOM to begin to remedy the core needs of this command. Cumulative years of resource constraints, however, have resulted in many program deficiencies that cannot be corrected in just one or two years and for which the costs of correction still considerably exceed available funding. These programs constitute the primary mission of FORSCOM for preparing Army Forces for mobilization, training and deployment. Resource limitations impact on all aspects of training, equipment requirements, facility needs and civilian staffing—all of which are essential to assure the capability to meet mobilization requirements and all of which are largely funded from the Operations and Maintenance (O&M) appropriations. Other requirements which include equipment funded through the procurement appropriation also heavily impact on this command's readiness, and while I will touch on these issues I will concentrate the majority of my funding remarks on the Operations and Maintenance Appropriations for which Forces Command is directly dependent.

Operation and Maintenance (O&M) funds comprise approximately 90 percent of the dollar resources Forces Command receives annually. These O&M funds pay for all of the day-to-day costs of maintaining the near-term readiness of our units to include funding for the operation of supporting installations. Operation and Maintenance appropriations provide for the fuel, repair parts, supplies for training and base operations as well as for the pay of the over 41 thousand civilians in our workforce. A history of both Active and Reserve Component FORSCOM O&M funding is displayed on the following chart:

CHART 12.—FORCES COMMAND, OPERATIONS AND MAINTENANCE FUNDING

[In millions of dollars]

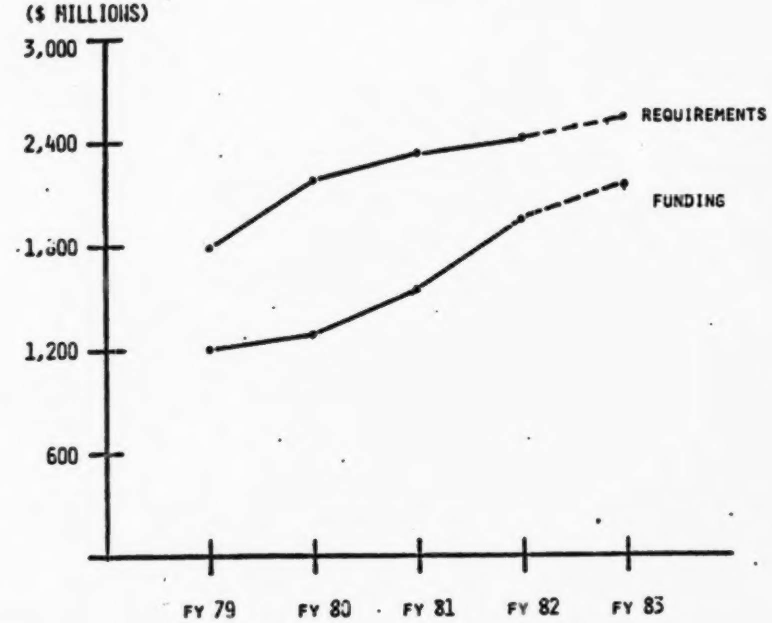
	Operation and maintenance, Army (OMA)	Operation and maintenance, Army Reserve (OMAR)	Total
Fiscal year 1979	1,122	381	1,503
Fiscal year 1980	1,235	389	1,624
Fiscal year 1981	1,540	461	2,001
Fiscal year 1982 [1]	1,988	597	2,585
Fiscal year 1983 [2]	2,124	615	2,739

[1] Program.
[2] Estimated.

Past years have been characterized by shortfalls in O&M funding and by chronic reductions of our civilian workforce. The following two charts will present separately the Active Component and Reserve Component Operation and Maintenance funding and total requirement trends at appropriation level during the five-year period through FY 1983.

Chart 13

FORSCOM
OPERATIONS & MAINTENANCE, ARMY



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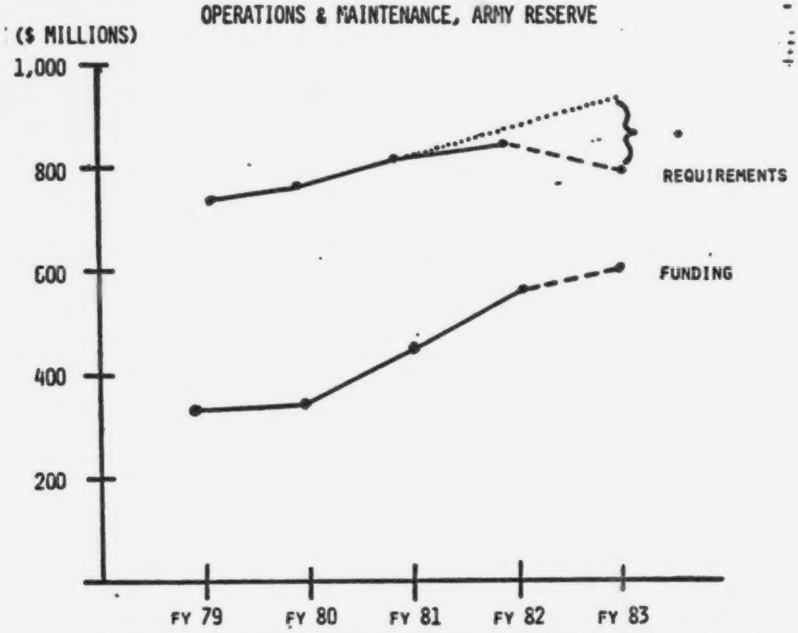
Total OMA funding has grown over one billion dollars or 93% since FY 79. Most of this increase occurred in FY 82 and marks the first year in which budget increases offset inflation and resulted in a significant growth in buying power. In FY 82, approximately 50% of the residual shortfall is attributed to the Backlog of Maintenance and Repair (BMAR) requirements and another 4% is comprised of other Real Property Maintenance Account (RPMA) requirements. In FY 83, BMAR and other RPMA requirements total nearly 60% of this shortfall.

Chart 14

FORSCOM

OPERATIONS & MAINTENANCE, ARMY RESERVE



* REDUCTION IN FY 83 REQUIREMENTS REFLECTS FY 81/82 FUNDING OF READINESS SUPPLIES AND EQUIPMENT FOR GO-TO-WAR STOCKS.

FY 82 funding and FY 83 expected funding for Reserve Components offer substantial improvement due to increased funding for inflation, readiness equipment and repair parts, force modernization, and force structure changes. However, even with these substantial funding increases, our overall total requirements still exceed funding by almost two hundred million dollars due largely to BMAR costs and the remaining requirement for currently authorized readiness equipment. The shortfall would be several hundred million greater if we counted unit equipment and repair parts that are required for mobilization but are not authorized for peacetime stockage under current authorized level of organization, and prescribed load list/authorized stockage lists.

MISSION AND BASE OPERATIONS PROGRAMS

Both O&M appropriations are divided into mission funding and base operations funding. Mission funds pay for training of our units while base operations funds pay for the maintenance of our equipment, operate our posts and maintain our physical plant. Subsequent presentations will address these programs separately and provide summaries of funding and requirement trends for these programs.

The current overall mission operating fund shortfalls to equip, field and train the force are significant. The following two charts depict this historical shortfall. Actual funding levels for this year and FY 83 are subject to further changes as we refine our formal FY 83 budget.

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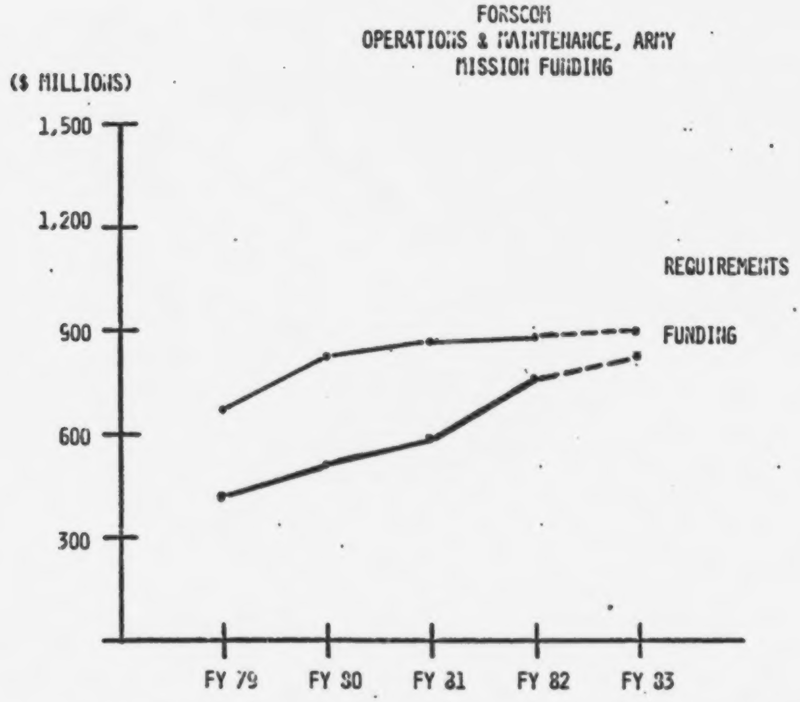
Chart 15



The FY 81 and 82 OMA Mission figures shown above are distorted slightly by the fact that several million was, out of necessity, tranferred to base operations to support fixed costs.

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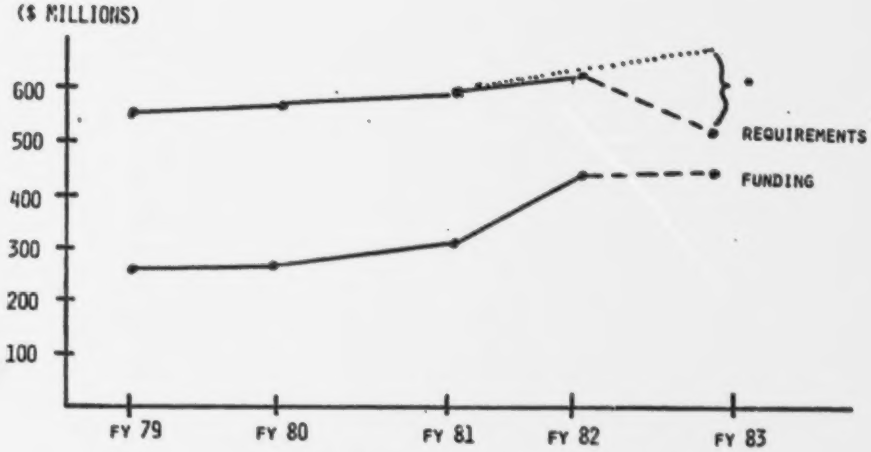
Chart 16

FORSCOM
OPERATIONS & MAINTENANCE, ARMY RESERVE
MISSION FUNDING



* Reduction in FY 83 requirements reflects FY 81/82 funding of readiness supplies and equipment for go-to-war stocks.

The current overall mission operating fund shortfalls to equip, field and train the Army Reserve are substantially lower than previous years due to improved funding for readiness supplies and equipment and repair parts. These improved funding levels are due in large part to the FY 81/82 Reagan Supplemental/Amendment and Congressional reprogramming in FY 82. Actual funding levels for this year and FY 83 are subject to further changes as we refine our formal FY 83 budget. The unfunded requirement for readiness equipment may change as peacetime authorization levels change due to changes in authorized level of organization.

FUNDING FOR BASE OPERATIONS

Forces Command, as every other command within the Army and similar to a business firm, has a "cost of doing business" or the fixed costs for both mission and installation or base operations support. In base operations approximately 75% of our funds are for civilian pay and contract costs and despite stringent conservation measures, utilities consume another 8–14%. Operating supplies and equipment account for most of the remainder. The following chart is a graphic representation of the FORSCOM base operation dollar for the OMA and OMAR appropriations.

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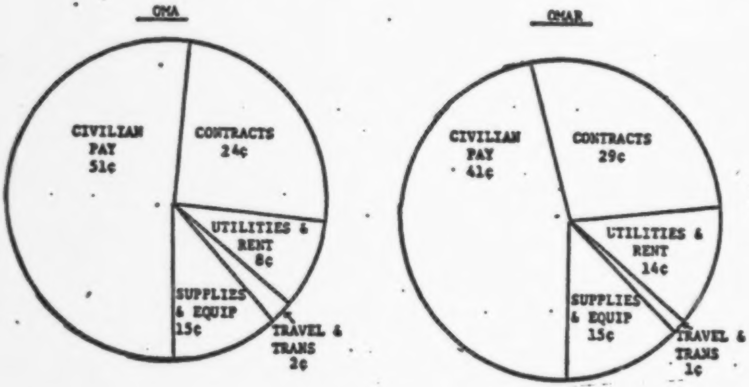
Chart 17

FORSCOM
BASE OPERATIONS DOLLAR
FISCAL YEAR 1983 ESTIMATE



CIVILIAN STAFFING

One or our more pressing base operations shortfalls continues to be an inadequate civilian workforce. People are essential to achieving our readiness mission. Since we have so few people relative to our needs, it is essential that we use every space we have to preclude increasing the use of military personnel to do base operations work and should be done by the civilian workforce. Our anticipated FY 82 shortfall is approximately 13,000 FTP civilian spaces. In FY 83, we need authorizations for those spaces and the $278M O&M to pay their salaries.

ANNUAL RECURRING REQUIREMENTS (ARR) FOR MAINTENANCE AND REPAIR

Our physical plant is deteriorating. In the past, we've had to reprogram funds from other than Maintenance and Repair accounts. This is a poor way to manage—the full need to maintain the physical plant should be recognized up front. This year, for the first time, the resources to meet the ARR have been provided and the projection is that a reduction in backlog of Maintenance and Repair (BMAR) will begin in FY 82. Illustrated in Chart 18 is the history of this chronic problem. Each year we have added to the backlog primarily because the funding has been insufficient.

CHART 18.—OMA, ANNUAL RECURRING REAL PROPERTY REQUIREMENTS

[In millions of dollars]

	Fiscal year—				
	1979	1980	1981	1982	1983
Requirement	192	216	257	280	285
Funds	166	138	177	296	265
Difference	−26	−78	−80	+16	−20

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The massive growth of the Backlog of Maintenance and Repair (BMAR) is shown on the following chart:

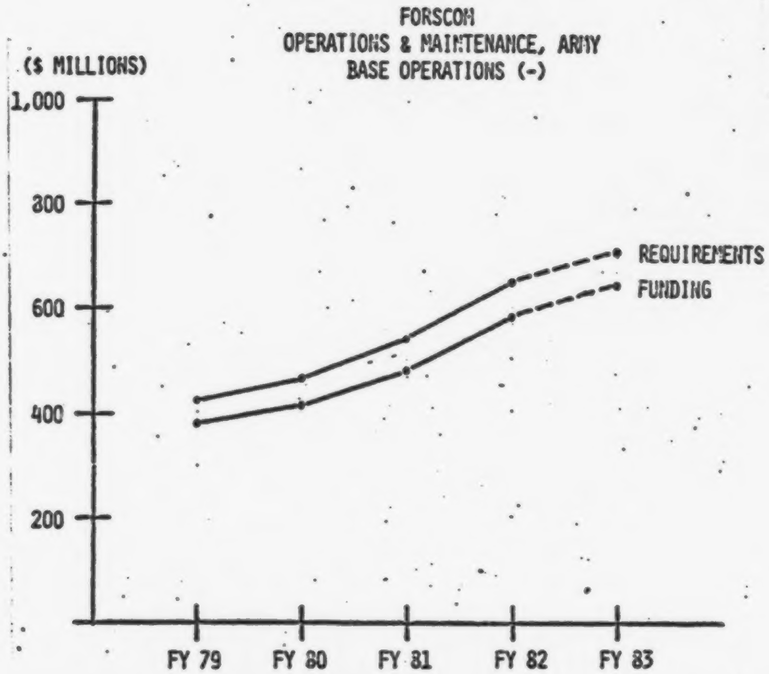
CHART 19.—*OMA, Backlog of maintenance and repair*

End of fiscal year:	*Millions*
1979	$256
1980	358
1981	438
1982	423
1983	452

What happens when maintenance and repair are deferred is illustrated below: Water systems deteriorate; Electrical systems become fire prone; Roofs leak; Structures fail; and Roads deteriorate.

The OMA Base Operation situation at FORSCOM is summarized in the following chart:

Chart 20



Base Operations (excluding real property maintenance activities) funding for the Army Reserve provided for cost growth in FY 81 but no program growth until FY 82, when modest program increases for DS/GS Maintenance, support of modernized equipment, and administrative vehicle support were provided.

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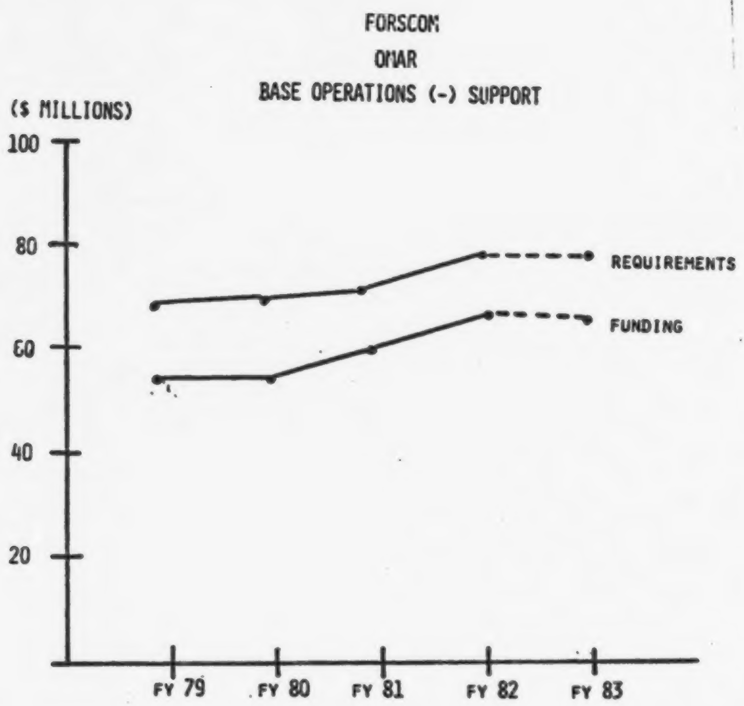
Chart 21



OTHER RELATED APPROPRIATIONS

There are other areas of resourcing outside of the O&M appropriations that directly relate to the readiness of the force. The Military Construction Army and the Family Housing Management Account appropriations both impact on the facilities in which our soldiers live and work. One cannot speak to the subject of readiness without considering this relationship.

MILITARY CONSTRUCTION, ARMY (MCA)

A $5.7 Billion MCA backlog existed for FY 81 at our active installations. This backlog also needs priority attention. Although this requirement is not within the O&M appropriation, it is closely related to the base operations annual maintenance and repair problem. In recent years, our backlog of MCA requirements has been increasing by approximately one-half billion dollars because of yearly construction cost growth and due to emerging new requirements to support unit activations/realignments, increased strengths and new weapons systems. Our backlog does not include premobilization construction cost which are currently estimated at more than a billion dollars. Nor does it include a major reorganization of the Army such as Division 86/Army 90 Transition.

Chart 22 depicts the FORSCOM backlog of total MCA construction requirements in billions of dollars at the time of submission, and reflects the yearly increase due to additional construction requirements and inflation.

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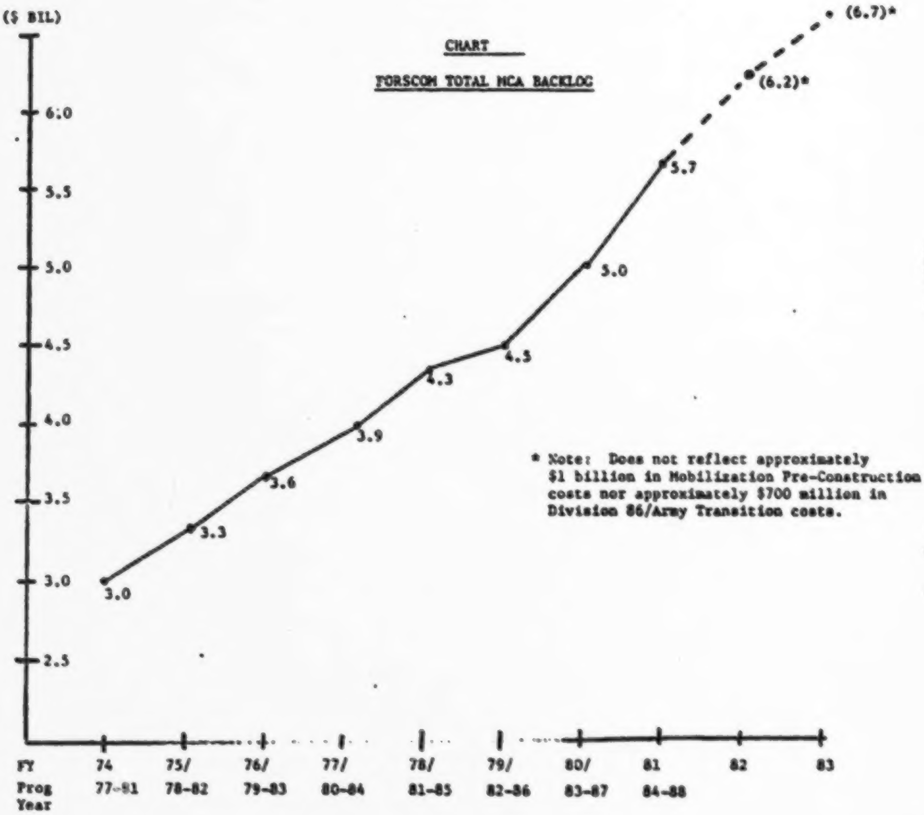
Chart 22



CHART

FORSCOM TOTAL MCA BACKLOG

* Note: Does not reflect approximately $1 billion in Mobilization Pre-Construction costs nor approximately $700 million in Division 86/Army Transition costs.

FAMILY HOUSING APPROPRIATIONS

Many of our family quarters are becoming outmoded, costly to operate and maintain, and in need of renovation/rehabilitation. The approach taken to identify and fund the annual costs necessary to keep our quarters from further deterioration (cost of ownership) is good. However, we are still left with the existing inventory. We have been forced in the past to reprogram funds from maintenance and repair to cover shortfalls in utility costs (a fixed cost). This was necessary to offset rapidly increasing utility rates.

Proposed funding for Deferred Maintenance (DM) work in the out years does not resolve this chronic problem and the occupants of the quarters suffer the most.

CHART 23.—*FHMA deferred maintenance*

End of fiscal year:	*Millions*
1979	29.7
1980	60.9
1981	73.1
1982	77.1
1983	76.1

Funding to upgrade and renovate our existing inventory has been inadequate (some quarters date back to 1855; i.e., General Custers quarters at Ft Riley, KS). We are forced to continue using quarters which were declared substandard in 1965 without a satisfactory solution in sight. There are 2,460 of these units still in the inventory out of the total 48,960 quarters available in FORSCOM. In addition, we still have quarters that lack basic amenities, i.e., dishwashers, garbage disposals, ade-

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quate kitchen space, central A/C when authorized, etc. Illustrated in the next chart is a history of this problem.

CHART 24.—FHMA, IMPROVEMENTS TO EXISTING QUARTERS, LINE ITEM IMPROVEMENT PROGRAM (LIIP) AND MINOR CONSTRUCTION

[By fiscal years, in millions of dollars]

	Fiscal year—				
	1979	1980	1981	1982	1983
Requested each fiscal year	121.8	104.5	114.7	122.7	140.8
Received	18.4	.2	7.7	10.8	10.8
Shortfall	103.4	104.3	107.0	111.9	130.0

FUNDING SUMMARY

In summarizing the status of resources for FORSCOM, I would like to emphasize that although the recent funding increases have provided the means to overcome some of the shortcomings of our existing forces and to improve our capability to sustain combat, many additional genuine requirements remain, and they are not inexpensive. Readiness costs money, and improvements require not only resources but continuous support. The sporadic disruptions of the past decade have compounded the task of attaining the state of preparedness required. I am hopeful that the excellent cooperation that we have enjoyed from this Congress will continue and we will rapidly achieve our mutual goal of a strong Total Army.

MOBILIZATION PLANNING

Earlier I alluded to the fact that our primary emphasis is on the reinforcement of NATO. The key to accomplishing this mission is the ability to mobilize, which means much more than just calling Army National Guard and Army Reserve units to active duty. Mobilization includes the whole process of bringing to bear the available resources of the total force, (Active, National Guard, Army Reserve and Civilian Component) to rapidly prepare and deploy units capable of accomplishing their wartime mission—a task we have been ill prepared to do in the past. In order to accomplish this mission we need:

1. Forces that fully assimilate new doctrine and systems, equipment and weapons.
2. An organizational structure, missions, and procedures which facilitate transition from peace to war.
3. Plans and management systems that support mobilization requirements.
4. The capability to respond to NATO and other NATO wartime requirements.

The complexity of the FORSCOM part of the mobilization process can be appreciated when it is realized that there are 53 mobilization stations which must man, equip, train and deploy (or put to work elsewhere in CONUS) over 4,400 separate and unique military units. Almost all of these units will need some additional resources and some intensive preparatory work in the hours, days or weeks between mobilization day (M-Day) and the date the unit deploys overseas.

Our ability to mobilize is contingent upon effective mobilization planning. Periodic mobilization exercises are necessary to exercise plans and systems at all levels up to and including the national command authority. Also vitally important to mobilization planning is an effective management system that uses automated systems which identify personnel and equipment shortages in order for us to fill units at their wartime resource level. Within FORSCOM we are developing a system that is a transition from unit readiness to force readiness. Force readiness provides a plan to optimize available resources that will produce mission capable units. This system involves detailed premobilization planning on the part of the Army Readiness and Mobilization Regions, under our Continental U.S. Army headquarters (CONUSA) in close coordination with the mobilization stations.

A key feature of this system is the calculation of post M-day requirements at installations for people and equipment to fill units assembling at and deploying from the installation. We are organized to use the available assets to meet our most pressing needs in the priority established by our plans. We know that we will run out of FORSCOM equipment sometime during the deployment process. As we improve the system we should be able to predict precisely when this will occur.

FORSCOM is responsible for providing the Army portion of the Rapid Deployment Force (RDF). Our requirement is to provide support and sustain [deleted]. Additional FORSCOM combat support and combat service support units are required to support and to supply common items to forces from the other services. We have identified one Corps HQ, three Army divisions and one separate brigade from which the force could be tailored to meet specific contingencies. These combat units are: HQ XVIII Abn Corps, 82d Airborne Division, 24th Infantry Division (Mechanized) (—), 101st Airborne Division (Air Assault), 6th Cavalry Brigade (Air Combat).

An additional 550 Active, ARNG, and USAR units are included in the RDF-A Program Force List to provide combat and combat service support to the Army and Joint forces.

We have established special management procedures, reviewed monthly, to be sure we can quickly fill these units, if needed, with people or equipment so that they would deploy in a combat ready condition. Because of these special management procedures to borrow as necessary, I can assure you that the Army portion of the RDF will be ready to go, and to win.

In summary, in FORSCOM we are making progress. Our training is better, our strength is up and so is the quality of our people. Our plans are sound, and our management systems are working. We know where we are trying to go, but to get there we need your help.

STATEMENT OF LT. GEN. M. C. ROSS, DEPUTY COMMANDING GENERAL, U.S. ARMY FORCES COMMAND

General Ross. Mr. Chairman, Senator Levin, it is a pleasure to appear before the subcommittee to discuss with you the readiness of forces assigned to the U.S. Army Forces Command.

In my prepared statement I have provided detailed information relative to the mission of Forces Command, how we are structured to do our job, the state of readiness of our units, and what we consider to be our most pressing needs.

After briefly mentioning each of the most salient points in that statement, I shall be happy to elaborate as desired by the subcommittee.

As a matter of refresher, Forces Command is the largest command subordinate to the Department of the Army and commands all Active and Army Reserve troop units in the Continental United States, Alaska, Panama and Puerto Rico. Upon mobilization the Army National Guard, currently some 390,000 strong, will join our ranks as will some 150,000 members of the Individual Ready Reserve.

Our primary mission is to prepare those forces for mobilization and commitment in support of national policy. In today's uncertain world, that means that the combat forces, along with the supporting forces needed to sustain them, must be manned, equipped, trained, and ready to deploy on what could be very short notice.

We are deeply concerned, therefore, as you are, with the readiness of those forces and are making every effort to apply all the resources provided us toward upgrading our preparedness.

UNIT STATUS REPORTS

In measuring the readiness of Army units in Forces Command, we use the unit status report which gives us the status of all units in terms of their equipment, personnel and training. This is, in effect, a simultaneous snapshot of all units at the time of the report and while it is a useful report it does have limitations.

The principal shortcoming is the fact that the report does not tell us what the status of units may be at the time they are scheduled to deploy. We are well aware of this and we also recognize that not all units will leave on the first plane or ship. Our task, then, is to manage the projected status of units at the time they load for movement to the overseas theater. We call this management of force readiness. By planning for the redistribution of people and equipment ahead of time we can insure that the high priority units will be "topped off" prior to moving to port. We have made substantial progress in our efforts in refining this process in the past few years and are continuing to do so.

In an attempt to summarize all those status reports in one sentence I would say that our personnel picture is good and is getting better; our training is better as we carry it out within budgetary constraints, but our most serious impediment to improving readiness is the shortage of equipment. Equipment is our most urgent need.

NATIONAL TRAINING CENTER

The increased defense funding provided by the Congress in fiscal year 1981 and fiscal year 1982 has enabled Forces Command to begin to remedy the core needs of this command. Two prime examples of this are the opening of the National Training Center at Fort Irwin, Calif., and the exploiting of technological opportunities in the 9th Infantry Division high technology test bed to produce a light, highly mobile, hard-hitting infantry division. Cumulative years of resource constraints, however, have resulted in many program deficiencies that cannot be corrected in just 1 or 2 years. These programs affect the mission of Forces Command in preparing Army forces for mobilization and deployment and they impact upon our ability to train.

Our readiness, therefore, is directly dependent on the operations and maintenance appropriations. The continued support of the Congress will be essential if we are to attain and maintain the high degree of preparedness which we all want our Army forces to possess.

I thank you.

Senator **Humphrey**. Thank you, General Ross.

Senator Levin?

Senator **Levin**. First of all, General Wickham, I would agree with you that much of our need is in the procurement area if we are going to achieve the readiness levels we seek. It is the big ticket procurement items I am particularly interested in—the aircraft carriers, the duplicative strategic bomber, building both the B-1 and Stealth. It is building MX missiles before we know how to base them, without even knowing how much it will cost us to redesign the missile once we figure out how we are going to base them.

It is those very large procurement items, as I phrase it the big ticket items, the glamorous items, which I believe drain readiness. Of course readiness does include procurement. We must procure spare parts, trucks, ammunition, and so forth. So the distinction I am making is between the larger procurement items and the readiness items, which obviously do include procurement.

MASTER RESTATIONING PLAN

General Kroesen, you have indicated that we have not made much progress in terms of our negotiations with the Federal Republic of Germany on our master restationing plan. I wonder if you could elaborate a bit on that. What efforts have we made and why have we had so little success?

General **Kroesen**. Sir, the master restationing plan has been with us now for 4 or 5 years. It was about 2 years ago we began to learn of the insistence of Congress that this should be funded either by NATO or the host nations. Negotiations to do this were initiated by a number of meetings with the Germans. They were initiated or consolidated with the Stoessel demarche presented about a year and a half ago on a list of things on which we would like to have assistance from the German Government.

Recently our Defense Department appointed specific personnel to continue those negotiations, and they have arranged a meeting that will discuss the MRP on the 17th of March.

As to why we have not made progress in the past, I must just say that the Germans are not open-handed. They have not jumped forward and offered funding for this. They have instead indicated their question as to the reasonability of it and the need for it, and there has been, I think, a lack of complete understanding of what MRP is to those responsible for review within the German Government.

I think those explanations are being made now and there will be a better understanding of MRP. I do not close out hope for the Federal Republic of Germany in recognizing the benefits and offering some asistance to us so that we can continue with MRP.

Senator **Levin**. And what level are the negotiators, the German negotiators, how high a level?

General **Kroesen**. They are direct appointees of the Minister of Defense, sir, but I cannot tell you what weight their evaluations will be given within the hierarchy of the German Government.

Senator **Levin**. Is it true it took the Germans over 1 year to make those appointments?

General **Kroesen**. I do not know, sir.

Senator **Levin**. You do not know when we first requested the Germans to appoint their negotiating team?

General **Kroesen**. No, I do not.

Senator **Levin**. What happens if the Germans do not reach some kind of reasonable solution on this problem with us? What action should be taken? What action-forcing mechanism should we adopt? Will we just ask the American public to continue to bear an undue burden in terms of mutual defense?

The Germans agreed to 3 percent real growth like all of our NATO allies. That was at the highest level. Our President negotiated that commitment a few years ago. We have sustained that 3 percent real growth since then. I understand there is no real growth in the new German budget.

Now, I do not think the American people are going to accept that, and my question is what action-forcing mechanisms can we adopt in terms of where we locate troops, how we locate troops in Europe which will protect our own military interests but at the same time not give the allies who are not willing to carry their fair share a free ride.

General **Kroesen**. Sir, you are asking me questions which are really beyond my purview to answer directly. In the U.S. Army in Europe we have a program that provides for the improvement of living and working conditions of our forces. We have approximately 16,000 soldiers today not living in barracks who ought to be there but lack adequate space. We have doubled them up in places so that they are overcrowded. We have facilities that must be built for modernization as well as this improvement of living and working conditions, and it has been my opinion from the beginning that provision of these things is the responsibility of the American Government.

MODERNIZATION OF U.S. FACILITIES IN GERMANY

Asking the Germans to help is something that they understand. I am not sure we have convinced them that they have moral responsibility of any kind to provide these things that are in fact things expected by all of the NATO forces to be provided by their own home governments. Living and working conditions are not something that are NATO's responsibility, and therefore, getting the host country to agee to pick it up requires the same kind of effort we made some years ago when they picked up a program called MOUSF, modernization of U.S. facilities in Germany, and they spent a few hundred million dollars in helping us renovate barracks we were then living in.

We have prepared the best plan we know how, that not only improves living and working conditions but also makes a contribution to improving the tactical disposition of our forces. If we are going to have to spend the money, we might as well spend it where it makes a tactical improvement and contribution to readiness. That is what our program does.

Whether we get the Germans to help us pay for it or not, it is still the best way in which we can provide for our own Army.

Senator **Levin**. I will pursue this question with you a little further later if I can, perhaps partly for the record. I know some of this is not within your area of responsibility, I understand that, but some of it could become very relevant to your area of responsibility if we began to move some of our troops in ways which did not reduce our military capability substantially but which would let our allies know that we are serious about them keeping their commitment as to where we are going to station our troops because they get an economic spinoff from that in terms of how many German civilians work for the American military.

Do you have any idea?

General **Kroesen**. Yes, sir. Approximately 40,000.

M-1 TANK

Senator **Levin**. Let me ask you some questions about the M-1 tank. You made some reference to it and there has been a lot stated in the press about it. Is this a tank which is a repair-prone lemon, or is this a tank which is the best available tank in the world? We hear two different reports on this. What is your field experience so far with it?

General **Kroesen**. Our experience, sir, is limited to the last 6 months of having those tanks arriving in Europe. None of the problems that have been highlighted in the CONUS press have come to our attention in Europe. The soldiers who are now equipped with the M-1, believe it is the best tank in the world. I believe it is the best tank in the world from what I have seen of it.

There is a great deal of enthusiasm among these battalions which now have it and which will receive it this year. In fact, we have soldiers extending their tour of duty in those battalions in order to serve a tour with the M-1 tank. I do not yet have creditable experience factors which can tell you things about maintenance, but we know already that maintenance at the unit level of the operators and tank crew themselves has been simplified and they are most pleased with their ability to take care of that tank.

Senator **Levin**. Would you say the M-1 represents a significant improvement over the present M-60's, including the M-60A3's, in terms of survivability, mobility, and the ability to bring combat power against the enemy?

General **Kroesen**. I think it is, yes, sir, but I say that without any criticism of the A-60A3, which may not be the best tank in the world but it is certainly not outclassed by many, either. Nevertheless, given the choice, I would rather that the entire U.S. Army in Europe were equipped with the M-1 Abrams tank than with the M-60A3, despite the fact that my comparison today has to be based upon statistical references of which I have no real firsthand knowledge.

Senator **Levin**. My time is almost up. Let me ask just one follow-up question, if I may, to see if I can squeeze it in. There has been a suggestion that we stop buying the M-1's and buy instead three M-60's for every M-1. What would be your reaction to that proposal?

General **Kroesen**. I certainly would not support it. I believe there is a requirement to introduce new technology into the weapons systems and the equipment of the U.S. Army. I believe a tank that is basically over 20 years old in technology and fundamental aspects of the tank should be replaced, and when I think that during that same period of time the Russians have introduced almost five new models of their tank with major technological improvements associated, I think it is about time we do the same thing for our forces for at least one new kind of tank. The cost associated with it is rather incidental to a field commander.

O. & M. UNDERFUNDING

Senator **Humphrey**. Gentlemen, I want to begin by focusing on the effect on readiness of O. & M. accounts. General Kroesen, will you begin by relating how the underfunding of O. & M. accounts has affected readiness in your command in the last 2 years? Can you characterize that and give examples?

General **Kroesen**. Sir, I began my statement saying that in the last 2 years we have had such increases in our funding, that we have been fully funded for training and for those things which are essential. We have been affected more by the inadequacies of our equipment, by the inadequacies of our training areas where a lot of O. & M. funding has been going now for the improvement of ranges and other training facilities, particularly in the local areas.

We have been affected more by the lack of new technological training improvements that we can make, miniature ranges that we can build at our local areas, the combat theater in which we used lasers for range firing indoors. I guess I would say that the inadequacies of our civilian workforce have been overcome to some degree in the last 2 years and we have released soldiers to go back to training.

It has been one of the greatest boons, and one of the things we still need to do because we still have soldiers borrowed from their units to accomplish the day-to-day details that are associated with normal operational activity. In overall readiness we still have an impact of inadequate war reserve stocks, fill level of our POMCUS stocks, but none of these things apply directly to the readiness of the forces that are in being today on the ground, but which do affect the long-term combat capability of those forces.

TRAINING FACILITIES

If I were to prioritize my requirements for additional funding, I would say training soldiers individually and collectively, both professionally and psychologically, to go to war is first priority, and that includes providing first class training facilities, first class training positions, and the ability to move units to those areas in which they can train. We need to improve personnel readiness, job satisfaction for soldiers, and associated with that, family satisfaction, which makes our soldiers pleased to be where they are.

We do have those improvements in the program in our local training area, and subcaliber ranges, simulation devices, combat theaters are there for the future. We are funding in 1982 those kinds of improvements that we can properly, logically, and effectively spend not to get to the ultimate condition but to make the progress we think is reasonable for this year.

Other limitations are associated with the procurement budget. The tactical wheeled vehicle fleet of U.S. Army Europe is as bad as or worse than the Eighth Army in Korea. We have 5-ton trucks older than their drivers. We have wheeled vehicles that are patched together and have long gone beyond their normal wear-out period.

If I had to settle on one thing to improve the combat readiness of Europe today, I would say replace the tactical wheeled vehicle fleet.

FAMILY HOUSING

Senator HUMPHREY. Very well. If I recall correctly, last year you seemed to put the greatest stress on improving working and living conditions. You said something to the effect that even if you knew the Warsaw Pact countries were going to move 6 months hence, that the greatest priority would still be in the area of family housing.

One gets the impression that that pressure has been relieved considerably. Is that correct or not?

General **Kroesen**. No, sir, it is not correct. We have made practically no gain in family housing, and it remains in my mind the principal peacetime problem of the U.S. Army in Europe. I think it is inexcusable that we, 35 years after having left troops in Europe following World War II, face a young captain with a wife and two children with a 52-week wait for a set of Government quarters, and we do that in so many places in Europe.

Sometimes our noncommissioned officers are faced with long, interminable waits for having their families join them. We have 53,000 sets of Government controlled quarters in Europe; 44,000 of those are on post; and the remaining 9,000 are Government leased quarters. Additionally, we have 35,000 military personnel who must live somewhere on the economy. Not all are married. Some are soldiers who don't fit in the barracks and live as single soldiers in apartments or rooms.

We still have that inadequacy of Government quarters that I think we should be providing for our soldiers. And then the family housing maintenance account, the backlog of maintenance and repair in family housing is of the same vintage and type that we have in all of our other facilities. It is still identified by me as our number one peacetime problem.

Senator **Humphrey**. What advice do you have? What I am trying to do here is build a record which will be useful to the Congress in the next several months in deliberating on the budget. What advice do you have for the subcommittee, the full committee and the Senate with respect to the importance of funding just as fully as we can the O. & M. account in the context of its effect on readiness?

General **Kroesen**. Sir, my first priority for spending money has always been the readiness and the effectiveness of the deployed force, the soldiers on the ground who may be called upon for a war on short notice. Whatever we have to do to improve their chances of accomplishing their mission if they are called upon to go to war I think is the most important funding expenditure that I know of.

To do that we must fully fund our training requirements, our repair parts requirements, our fuel requirements and our flying hour requirements, and those things that go to assuring that we have a professionally trained organization, one that has confidence in itself, one that we know can be employed in the mission of going to war.

Senator **Humphrey**. You characterize O. & M.'s spending as the most important expenditure. More important than even procurement, although you badly need modernization. Is that correct?

General **Kroesen**. I split procurement into two items. One is procurement of the equipment that is essential for that force to be able to go to war today, and we are an underequipped Army. I mentioned tactical wheeled vehicles. Those are the greatest improvement I know we could make, to procure that fleet, not only of the tactical but nontactical vehicles, for peacetime operation as well.

EQUIPMENT MODERNIZATION

Procurement of modernization is to me one of those essentials that must come along because the Army has been underfunded and has not been modernized. We went through a 20-year hiatus in which no new equipment was introduced into the Army except the TOW antitank missile and the Red Eye and some night vision devices and a few things like that, but the helicopters we have today are still World War II, almost, certainly 1940's technology.

The M-113 armored personnel carrier was introduced into our Army in the 1950's, and we have already talked about the tank being over 20 years old. I just think there must be a modernization of the Army in order to keep it competitive on the battlefield, because we know and soldiers know that the Soviets have not failed to modernize their Army, and they need for their own sense of confidence in their ability to do their job in wartime, an understanding that they are being equipped with that which is the latest we can provide for them.

So I cannot divorce entirely the procurement budget, but I can say that coming down to the crunch, if you had money to spend, then I say the deployed force which might go to war on short notice deserves to be fully funded in O. & M. to assure that it is professionally and psychologically ready for that war.

Senator HUMPHREY. I understand what you are saying. As you know, the political reality is that the O. & M. budget has in recent years been the first target for cutting because the rate of spendout is much faster than in other areas. I suspect that it will be a tempting target again in 1983, and that is why I am focusing so much on this area.

General Wickham, can you describe how long have you been in Korea?

General WICKHAM. Two and one-half years.

Senator HUMPHREY. Can you describe what is the readiness picture as it has been affected by O. & M. accounts in your command in the last 2 years?

General WICKHAM. As you know, Mr. Chairman, the cancellation of troop withdrawal has turned the picture around in Korea. In the past 2 years there has been an enormous increase in O. & M. funding as well as in military construction funding; this year alone, some $400 million of new construction and O. & M. activity related to that. We have continued over the years to improve our ammunition posture.

So in terms of the operational readiness of our forces, I see no degradation of them. The readiness has improved.

Senator HUMPHREY. Readiness has improved by virtue of increased O. & M. spending the last 10 years?

General WICKHAM. Yes; and I would echo General Kroesen's points here. There needs to be a proper balance. That is one of the arts, I guess, of the defense budget, the proper balance between procurement and the long-term commitments that come with that, and the need for maintaining the deployed forces and the deployed forces with adequate sustaining resources to do their job.

We provide with WRSA ammunition support for some 30 Korean divisions, and in an open session I won't go beyond that. We do not have enough resources to meet the requirement. We must add to that, so we do take risks because the costs of doing it all in one budget are too high. We are making considerable progress. We still have considerable distance to go.

O. & M. FUNDING

We have funded in the past years excellent exercises, joint exercises involving deploying forces from the United States and the western Pacific. Those are absolutely essential to develop interoperability with our allied troops, and we must continue. That is an O. & M. funding which does not immediately appear to be paying off the way procurement might.

In regard to the quality of our living conditions, now that troop withdrawal has ended we are starting to allocate resources into putting our troops into quality living conditions. We must continue. General Kroesen talks about family quarters. In the Korean situation, the few families we have over there come for 2-year tours. To the extent we can get them there for longer than 2 years, we improve our operational continuity and reduce the pipeline.

So money spent in that area, which is O. & M. and MILCON, contributes to readiness just as much as does the procurement of new equipment. So on balance I would say that we are on the upward slope in terms of improved operational capabilities because of O. & M. funding. We have a long way to go.

General **Kroesen**. Sir, could I add one sentence?

Senator **Humphrey**. Yes, General Kroesen.

General **Kroesen**. When you said O. & M. budget has been a primary target for cutting, army procurement has not been far behind during those years either, and that is the reason my statement and General Wickham's initial statements both say we are inadequately furnished with war reserves. Our POMCUS stocks are not filled. We, in fact, need hardware and equipment, and it is the reason our wheeled vehicle fleet is as bad as it is.

Senator **Humphrey**. Yes. I will get into those areas but I did want to focus on the O. & M. budget in the beginning.

General Ross, for FORSCOM, how do you assess the level; the adequacy of O. & M. funding in the last 2 years in your command?

General Ross. As you know, sir, about 90 percent of all of the money we receive is in our O. & M. budget, but let me first say that we agree with the priority of O. & M. support and all other support to the forward-deployed forces. Over the past few years we have taken perhaps a greater share of the total shortfall than might be apparent. We should continue to do this in support of the forward-deployed forces.

I would say again our most urgent requirement is equipment, and although we have had some increase in the past few years of O. & M. support, we need a continuum or O. & M. support which must be better than just enabling us to maintain the status quo. We must have sufficient funds to increase our goal of war support.

General **Kroesen**. We have not addressed it, sir in specifics. I could give you a table for the record later of how we stand in days of supply of all of our classes of supply.

Senator **Levin**. That would be helpful.

[The information follows]:

Status of Class of Supply in Days of Supply (DOFS) as of 31 December 1981.

[Deleted.]

Illustrated above is an imbalance among Classes of Supply. This problem is further aggravated by imbalances within Classes of Supply and by significant shortages in major weapons system, supply vehicles and major assemblies (engine, transmissions, etc.) for fighting vehicles.

Data source War Reserve 1724 Report as of 31 Dec 81.

General WICKHAM. I will do the same.

Senator LEVIN. And where the deficiencies are particularly.

General WICKHAM. Right.

Senator LEVIN. Will you also do the same?

General WICKHAM. I will. It is classified.

The Korean scene is different from anywhere else in the world. And we have been adding to their supplies year by year and there are substantial funds in the current budget request to add to that level of supply.

[The information follows:]

DAYS OF SUPPLY

The following table reflects the 31 Dec 81 status of War Reserves held in Korea and Japan for Korean forces:

WAR RESERVE STOCKS FOR ALLIES (WRSA)

	RQMT days of sup	On hand ROK/ Japan	Percent of fill	Short in (millions)	Note
I. Subsistence		[deleted]			
II. Clothing				$5.585	1
III. Packaged pol				1.318	1
III. Bulk pol					
IV. Barrier					
V. Ammunition				3938.950	2
VI. Personal items					
VII. Major end items				332.765	1
VIII. Medical				19.172	1
IX. Repair parts				101.665	1

NOTE 1.—Above based on support for [deleted] division equivalents. Fill for above classes of supply, less ammunition, is from US Army excess assets. Currently there are no funds appropriated, either procurement of major items or stock fund, to fill Korean War Reserve stocks for allies. Until this situation is changed, fill will not increase significantly.

NOTE 2.—Stockage objective for Korean army and Marine Forces is [deleted] short tons.

Senator LEVIN. If you would do that in a classified way, that would be helpful. General Ross, do you want to supply the same kind of list for the record? Are you able to do that?

General ROSS. Yes, sir.

[The information follows:]

DAYS OF SUPPLY

Tables of FORSCOM War Reserve and Training Base Levy are as follows:

TRAINING BASE

Nomenclature	Lin	Anticipated FORSCOM levy
Aiming circle	A22496	[Deleted.]
Carrier, M113	D12087	
Carrier, 81 mm mort	D10726	
Howitzer, M114 155 mm t	K57803	
Machine gun, 0.50 cal M85	L92112	
Mortar, 81 mm	M68008	
Mortar, 4.2 mm	M68282	
Plotting Board M16	P07900	
Radio, AN-VRC 64	Q56783	
Rifle, M16A1	R94977	
Submachine gun M3A1	U56346	
Tank, 105 mm M60	V13101	

WAR RESERVE

Nomenclature	LIN	Anticipated FORSCOM levy
Carrier, M548	D11049	[Deleted.]
Carrier, M113	D12087	
Carrier, 4.2" mort	D10741	
Carrier, TOW	E56896	
CEV	E56578	
How, 105mm, M102	K57392	
How, 155mm, M109	K57667	
How, 8", M110	K56981	
Machine gun, 0.50 CAL M85	L92112	
Tank, 105mm, M60	V13101	
Truck, 5T, CGO	X40968	
Truck, 5T, CGO	X40831	
Truck, 5T, WRKR	X63299	
Truck, 5T, TRAC	X59326	

Senator **LEVIN**. Let me ask you about POMCUS sets five and six. General Kroesen, last year the Congress prohibited those sets from being transferred to Europe. I am wondering whether or not you are proposing they be transferred this year in the budget.

General **KROESEN**. Sir, this budget does include money and a request that the Congress lift the restriction on sets five and six. There is no equipment in five and six now. None has been sited at those locations.

The Belgians and Dutch have already procured the real estate. NATO funding for the warehousing, road access, and for provision utilities is already approved, and the sites are being constructed. We will begin—some began in November of 1981, and the construction will continue until I think, January 1984. And we would like to have authority to fill those sets.

Senator **LEVIN**. General Wickham, is there a difference in the Army as to whether these sets should be transferred from your perspective? And I will ask General Ross the same thing.

General **WICKHAM**. The POMCUS situation has no relationship to the Korean scene at all. We have no POMCUS in Korea.

Senator **LEVIN**. It does affect our flexibility in some ways and it could, in turn, affect Korea.

General WICKHAM. Yes.

Senator LEVIN. General Ross?

General ROSS. I can only say, sir, that we have provided equipment to the POMCUS sets in Europe taken from some of our units. We stopped doing that last fiscal year. And during the time that we did provide equipment an arbitrary figure, we assessed we could draw down active component units at 70 percent of their authorized equipment and reserve components at 50.

But we have not done that since fiscal year 1981, and we have no plans to resume that drawdown of equipment.

Senator LEVIN. Do I understand your answer is that you support the decision to preposition those sets in Europe?

General ROSS. One through four.

Senator LEVIN. Five and six.

General ROSS. Yes, sir, but not from existing equipment.

Senator LEVIN. Then where would it come from?

General ROSS. It should be a separate buy.

Senator LEVIN. Is it a separate buy in the budget?

General KROESEN. It is identified in that 18 percent increase in procurement you mentioned, sir.

Senator LEVIN. So if that is reduced, it could affect that decision?

General ROSS. Yes, sir.

Senator LEVIN. Is that correct?

General KROESEN. [Nods in the affirmative.]

Senator LEVIN. And the budget does identify the buy as being in the increase. Is it specifically identified in the budget?

General KROESEN. I do not think so, no, sir. You will not find in the procurement of equipment annex of the budget request the specific identity for division sets five and six.

Senator LEVIN. General Ross, is your support of this decision dependent upon an increase in the procurement budget?

General ROSS. No, sir. We are independent of that. We merely respond to the Department of Army to provide from our assets in troop units what it is deemed for us to do in POMCUS. As I say, we have not done that since fiscal year 1981. We are not taking equipment from active or reserve units to put in POMCUS.

Senator LEVIN. And you would oppose it if it were done that way?

General ROSS. Yes, sir, I would oppose a further drawdown of assets from our forces to do that.

FIELD TRAINING EXERCISES

Senator LEVIN. I am wondering if each of you could tell us how often the units under your command participate in field training exercises as a unit and how this measures up against what is an ideal or what is your goal?

General KROESEN. Sir, we have a USAREUR training directive which starts at the highest level, specifying that each of our corps will have a corps-level exercise once every two years.

It says divisions will have a division-level exercise once a year. Brigades will have brigade-level exercises twice a year, and battalions will go to the field once a quarter.

Participation in one of the higher-level exercises counts toward the requirements for the lower echelon, so if a battalion participates in a corps exercise, that is one of the battalion's requirements.

Now, those are rather formally established requirements for each echelon for our command. There are requirements established for company-sized unit, for platoon-level training, for squad-level training. And in general, our units and organizations make their training programs and training schedules in accord with that requirement.

There are times when weather interferes. There are times when an exercise is not scheduled at the same level that a battalion commander would like. But on the whole, it is the way we accomplish our training.

Senator **LEVIN**. What about ammunition, is it limited by ammunition supplies or lack thereof?

TANK GUNNERY AMMUNITION

General **KROESEN**. We have ammunition limitations and our requirement, for example, for tank gunnery, if we were to do all of the tank gunnery for each tank that the TRADOC training directives tell us to do, we would need 210 rounds per year per tank. We will this year accomplish that training with about 155 pounds per tank.

Senator **LEVIN**. So you are 25 percent below what you need to meet your own standards?

General **KROESEN**. Yes, sir. But I will say also that we have never been able to schedule sufficient time at our tank gunnery ranges at Grafenwoehr, Wildflecken and Baumholder to use all of the ammunition we would have if we went to 210 rounds per tank.

Senator **LEVIN**. Why is that?

General **KROESEN**. Because of time. We only have the tank ranges at Grafenwoehr 8 months of the year. The Germans use them 4 months.

And running the number of battalions that we have in there, and considering weather conditions that close down the ranges at times because of fog, when you cannot see the targets, we are unable to expend fully 210 rounds per tank per year.

Senator **LEVIN**. So the lack of ammunition is not the limiting factor, it is the lack of range availability and the weather.

General **KROESEN**. The lack of ammunition does not allow us to approach the 210 rounds per tank. But what I am saying is that although we have never been able to approach that in the past, we could fire more than 155 rounds per tank even given the limitations on ranges.

Senator **LEVIN**. How many more could you fire?

General **KROESEN**. I think we requested this year 180.

Senator **LEVIN**. And how many are in there, do you know offhand?

General **KROESEN**. The 1982 figure is 155. I cannot tell you what the 1983 budget will provide.

Senator **LEVIN**. You hope it provides 180?

General **KROESEN**. I hope it will provide the 210.

Senator **Levin**. But if you cannot use the 210 because of the fog and the absence of range availability, why ask for it?

General **Kroesen**. Because if I got it and did not spend it, I would carry it over to the next year, and it would reduce the demand for buying the year after.

Senator **Levin**. But the amount you can be confident of using is 180?

General **Kroesen**. In 1982, yes. But I also have in the budget request range improvements, civilian manpower to operate the ranges and therefore to make them more efficient, and we will be able to increase the efficiency of our tank gunnery program and probably be able to fire more. That is why I would like to aim for the 210-round objective that TRADOC says we should be striving for.

Senator **Levin**. There is nothing in the budget about reducing the amount of fog, though.

General **Kroesen**. No, sir.

Senator **Levin**. Congress will add the fog. [Laughter.]

General **Kroesen**. There is something in the new tank which allows us to shoot through the fog.

Senator **Levin**. We could use some of that around here. [Laughter.]

OK, in any event, somewhere between 180 and 210 is what you would actually need, depending upon whether you had the personnel to run the ranges?

General **Kroesen**. Yes, sir.

Senator **Levin**. And you do not know offhand what is in there?

General **Kroesen**. I do not know, but there may be someone here who does.

General Richardson, can you address that?

AUTHORIZED TRAINING AMMUNITION

Senator **Levin**. I am just curious about how this is handled in the budget. We have heard a lot about the shortage of ammunition, that it is a limiting factor. Here is a concrete example of where it is limiting, where you had 155 but you could have used 180, maybe up to 210. So now I am interested in how we address it in the budget. It is a very precise kind of statement. We can find that out without testing your memory here.

General **Richardson**. We try to authorize for training what the field commander has requested in accordance with other demands, the experience of the previous year, the Army ammunition asset posture, and what we anticipate would be his demands from what we know.

Generally speaking, though, we are not able to authorize field commanders the amounts of training ammunition they have requested.

Senator **Levin**. Ammunition has been one constraint. Has fuel been a constraint on field exercises?

General **Kroesen**. Fuel has not been a restraint, no, sir.

Senator **Humphrey**. General Wickham, what are the implications of the constraints? What are you going to do? What would you do if you ran out of materiel?

General Wickham. Basically, what we have to do is stretch it out. We stretch it out in terms of allocation, and the allocation is based upon the most vulnerable avenues of attack into the Republic of Korea and the timing of the defense.

The point that I am making here is that we must continue chipping away at the shortfall by providing additional funding over the years to bring the stockpile levels up.

Senator Humphrey. Quite so. But in order to obtain the funding, people must understand what the implications are if we do not provide it.

General Wickham. Right.

Senator Humphrey. And that kind of testimony is too often lacking. We get so bogged down in details here, we get so tangled up in the trees we cannot see the forest.

General Wickham. I can give you the specifics in classified form and they are concrete.

Senator Humphrey. And in response to my question, you say you would stretch that. So what your are saying is you would limit yourself to a defensive role, you would be awfully careful about expending materiel. You would not be able to be very aggressive in that posture, would you?

General Wickham. There is a certain kind of allocation that one must accept to deal with the realities of the stockpile shortfall.

Senator Humphrey. I am sure those figures would be of great comfort to the North Koreans.

General Wickham. That is why I do not put them into open testimony.

Senator Humphrey. This is open testimony.

General Wickham. Yes, sir.

C^3I SYSTEM

Senator Humphrey. You say that one of your readiness requirements involves improvement of the C^3I system.

General Wickham. Yes. I can elaborate on that.

Senator Humphrey. Will you, please?

General Wickham. Yes; my classified statement has the data on ammunition in it, so it is already in the record.

The C^3I situation in Korea, similar to Europe, goes back to the time the war ended. In our backbone system in Korea, largely technology of 30 to 40 years ago, the sites are on top of mountaintops, very vulnerable to North Korean air attack or by ranger commandos.

Incidentally, the North Koreans have the largest ranger commando force in the world. So we have to replace that backbone system, which is one of the key elements of our ability to communicate.

TACTICAL COMMUNICATIONS

A second element involves the tactical communications. We must be able to deal with new units coming in, augmentation-type units, as well as develop an ability to communicate in security with the Korean units.

We have made some progress there in the past 2 years. Much needs to be done.

Senator HUMPHREY. How does the 1983 budget look to you in that respect as it stands?

General WICKHAM. The 1983 budget provides some funding for the backbone system. There was money in the 1982 budget, what we call TPICK, telecommunications plan for improvement of communications in Korea. There is money there, and I commend that to your approval.

There is money also in the 1983 budget to begin the improvement of our tactical communications and for some limited deployment of additional personnel to fulfill our needs. And I commend both of those areas for improvement.

Senator HUMPHREY. Are you saying at the conclusion of the North Korean exercises they are in a position to launch an attack?

General WICKHAM. That is right. They devote 20 percent of their gross national product to defense. Their young men are drafted for 8 years. They have the fourth largest army in the Communist world. If the United States had in its Army what the Koreans do in relation to population, we would have 10 million men under arms.

Now, what does a nation of 17 million people need with that kind of armed forces if it is simply concerned with defense? It is an offensively oriented country and postured that way with its military. And we believe they have adequate resources to go for a couple of months without asking for help.

So what keeps the peace is our deployed forces there. What keeps the peace is the tough readiness condition of our forces. What keeps the peace, thankfully, is the support of the Congress here and the administration to maintaining our posture of readiness.

Senator HUMPHREY. You said this was the largest exercise observed. By what factor, can you give us some idea?

General WICKHAM. By what factor? I would say by——

Senator HUMPHREY. Can you qualify it in some way?

General WICKHAM. The largest in terms of scope, numbers of units, numbers of divisions, the largest in terms of scope of mobilizing civilian reserves.

Senator HUMPHREY. You said they were brought to a very high state of readiness. You have never observed—I realize you have been there only 2 years and something—but you are saying since the war we have never observed these forces on so large a scale brought to so high a state of readiness?

General WICKHAM. That is right. They periodically go through exercises, as do we.

Senator HUMPHREY. Well, what lessons have we learned from what we have observed.

General WICKHAM. Well, we have reinforced our concern for the nature of the enemy we face there, that preparedness is of great importance, and emphasis, as my statement suggests here, on the continuing need to build for sustainability; the continuing need to modernize our forces there; and the need now to turn the corner and start improving in modest ways the structure that we have in Korea in terms of military capabilities.

Senator HUMPHREY. Was there some element of miscalculation; some element of underestimating the U.S. resolve that led the

North Koreans to attack previously? Is that a correct reading of history? Are there any historians here?

General **Wickham**. That led them to attack in 1950?

Senator **Humphrey**. Yes.

General **Wickham**. I seem to recall we took most of our forces out of Korea except for a resident military assistance group, and that some prominent statesmen drew the line of vital U.S. interests to the east of Korea.

KOREAN READINESS LEVELS

Senator **Humphrey**. I am very concerned, in light of the apparently growing aggressiveness of the regime there and their impressive military capability, about our apparent low level of readiness.

General **Wickham**. Let me just say, in my time in Korea we have had an assassination, we have had a change in government, we have had widespread insurrection in the South during that change. And in all of this period, the United States deployed additional forces to the Republic. It made clear unequivocally in diplomatic channels that the United States would not tolerate any outside interference in the Republic of Korea.

I am convinced we stayed the hand of the North Koreans, if they were prepared to execute some military option. With the current administration we have made it unequivocally clear that Korea is an important interest to the United States.

We have canceled troop withdrawal. We have rounded the corner of investing resources in Korea to modernize our facilities. This month we are deploying an A-10 attack squadron permanently into Korea. We have improved our posture and resources in the West Pacific.

So I think we have made it abundantly clear to the North Koreans that we will not tolerate any outside interference.

As the senior U.S. commander there, a commander of the Korean Armed Forces, over half a million of them plus the United States, I am convinced that we can defeat any North Korean aggression, given what I have on the ground and given the augmentation of forces that are planned to come into Korea.

Senator **Humphrey**. I am glad to hear that expression of confidence. But I wonder how you can make that when you have just acknowledged some serious shortfalls, particularly in the area of materiel sustainability. I admire your spirit and your confidence, but I do not see how it is justified.

It seems to me we have some awfully big gaps. I cannot imagine how the North Koreans can be all that impressed with our capabilities when, if I understand your testimony correctly, you will be pretty limited or precluded from any aggressive tactics after just a few weeks' time because of lack of materiel.

General **Wickham**. The glass is half full, Mr. Chairman. And the resources that we have there are not less than what is required, but the resources are adequate to conduct a defense. We could conduct it more successfully and further north were the glass of resources to be totally full.

Over the years we have gradually added to our stockpile. We must continue to add to it. And that is my message to you.

Senator HUMPHREY. You feel the 1983 budget continues that growth?

General WICKHAM. That is right. It adds some 45,000 tons to our WRSA stockpile, as well as upgrading the U.S. Army posture. Of course, we still have further to go in subsequent years.

Senator HUMPHREY. Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

RAPID DEPLOYMENT FORCE

First, relative to the Rapid Deployment Force. I know we do not have the commander here, but perhaps you can help us a bit, General Wickham, in terms of the Army units, in terms of their readiness.

We made a commitment to respond militarily, if necessary, in the Persian Gulf in the event there is a Russian military invasion, attack there, a commitment that I happen to feel very strongly about. And I am wondering whether we would carry it out.

From your perspective, are the Army units ready? Do we have the war reserves? Do we have sustainability in those units to carry out the commitment we made?

General WICKHAM. Well, actually, I think I should turn to General Ross to respond to that. Those forces come from him.

Senator LEVIN. General, I intended to get to you later, but let me get to you sooner.

General ROSS. As you know, we provide the Army forces for the Rapid Deployment Force, and under the command of the Joint Task Force, which has operational command of our 18th Airborne Corps and two divisions, the 82d Airborne and the 101st Airborne Division Air Assault.

We also have another division earmarked, the 24th Division, and a combat brigade air cavalry stationed at Fort Hood, Tex.

In support of these major units we have some 545 combat-to-combat service support units earmarked to deploy in support of this force.

In our force readiness planning those units can meet the deployment schedule as provided to us by the commander of the joint task force. Within that figure of 500-and-some units, 154 belong to our Reserve component and we monitor those units very closely and they too will be able to meet the mobilization and deployment schedule in the contingency plan as we know them today of the joint task force.

Senator LEVIN. So you do not have an opinion as to whether the plan is adequate, you just have an opinion that you can meet the plan?

General ROSS. Yes. Our responsibility ends with supplying the forces.

WAR RESERVE STOCKS

Senator LEVIN. Looking at the status of war reserve stocks in Europe, I am not able in open session to give the percentages of our requirements that we in fact have on hand. I can tell you that in many instances, in most instances, they are disturbingly low. I gather that there are some improvements in this budget. The figures we have are for September 1981, the status figures we have.

I am wondering, General Kroesen, whether or not without getting into the specifics, you could tell us that the September 1982 figures will look significantly better.

General **Kroesen**. Measured in days of supply I would not say they will be significantly better, sir, but there will be identifiable improvement.

Senator **Levin**. What about our allies? Are they in better shape on war reserve stocks than we are? Can you go through them one by one and give us a general assessment?

General **Kroesen**. I don't think I can go through them one by one, because I truly am not privy to specific information regarding their stocks of war reserve supplies. I can say in general NATO is not as well off as the United States. The other NATO nations do not have the stocks that we have.

In some cases they have more of one thing and less of another, but generally they have fallen behind in their promise to meet a NATO standard also.

Senator **Levin**. I am sorry. Is there a common standard for all of us in terms of days? Is that the way it is measured?

General **Kroesen**. Yes, sir, there is a NATO standard.

Senator **Levin**. In terms of days?

General **Kroesen**. In terms of days of supply.

Senator **Levin**. And that is the same for everyone?

General **Kroesen**. Yes, sir.

Senator **Levin**. Would you supply in a classified way, or could you obtain for us, the number of days' supply in the same way you have done for us—clothing, equipment, package, petroleum, conventional ammunition, and major items? There are about six or seven items. Can you do the same for the allies or could you obtain if for us?

General **Kroesen**. I don't think I can, no, sir. I am not privy to specific information on the war reserve stocks of the allies.

Senator **Levin**. Who would be privy to them?

General **Kroesen**. The ——

Senator **Levin**. In the Army or in the Defense Department, who would be privy?

General **Richardson**. That would come from the Department of Defense. We normally don't keep that in the services.

Senator **Levin**. I would like to ask that, if we could, for the record. I know it is classified material. If we can get it in that form I think it would be interesting to compare. We do have our war reserve stocks in classified form to study. It is pretty disturbing to me.

Senator **Humphrey**. Certainly General Rogers would be able to get that for us if the Army itself does not have it.

Senator **Levin**. Mr. Chairman, if it is all right, I would like to ask either General Rogers or the appropriate person in the Defense Department to give us those comparative figures so we can see how the allies are doing it compared to us. Not that it is that high a standard, nevertheless we should see how they are doing relative to us.

General Wickham, can you tell us in terms of your end of things whether we will be better off in September 1982 than we were in September 1981?

General Wickham. Most assuredly, if the budget request that you are considering in the way of O. & M. and the simple procurement, not the sophisticated procurement, is fulfilled.

Senator Levin. That is the 1983 budget request you are talking about. I am trying to find out whether in September of 1982, at the end of this fiscal year, we will be significantly better off than we were in September of 1981.

General Wickham. Yes.

Senator Levin. General Ross, can we hear from you?

General Ross. I would answer that in the affirmative, sir.

MILITARY PERSONNEL PICTURE

Senator Humphrey. We must relinquish this room at 12 for another hearing and we do want to have a few minutes in closed session, so let me very quickly finish here.

General Ross, you made the statement that "I would say our personnel picture is good and getting better." What is the basis for that statement?

General Ross. Well, sir, let's just take gross strength. Our gross strength right now is close to 98 percent. We expect to be at 100 to 101 percent probably in May of this year. Our noncommissioned officers figure is now approximately 96 percent and in our combat battalions at 89 percent.

This is a considerable jump from where we were a year ago.

Senator Humphrey. How about the quality of personnel? Based upon my observations you have many very good people, but I wonder what about quality?

General Ross. Quality is improving, sir.

Senator Humphrey. Yes, what is the trend?

General Ross. The statistics which have been provided to me, although I am not an expert, by our recruiting command for this fiscal year are quite heartening as to the number of high school diploma graduates we are recruiting, as to how few category 4 personnel we are recruiting.

Senator Humphrey. How are your seeing that in your command?

General Ross. Sir, we are beginning to feel the influx of soldiers coming from training and doctrine command training centers. We are beginning to notice that in terms of personal individual performance and it is beginning to creep into our discipline statistics. In other words, they are going down and we expect those trends to continue. We have no reason to believe they will not.

Senator Humphrey. You say also that equipment is your most urgent need.

General Ross. Yes, sir.

Senator Humphrey. And that has come through in the testimonies of Generals Kroesen and Wickham as well. I have nothing further for open session.

Senator Levin.

Senator Levin. I have just one more question. The same point comes through very well in terms of the classified material too, Mr.

Chairman, in terms of the percentage of requirements we have in the war stocks. I will not get into the figure. I guess that is all I can say, but the point comes through pretty dramatically in the figures.

NATO WAR RESERVE STOCKS

I have a question of General Kroesen. General, you indicate you do not know how well our NATO allies are doing in terms of war reserve stocks. How were you able to plan without such knowledge?

General KROESEN. Sir, I didn't say I don't know. I said they have not, to my knowledge, met their requirements as well as we have, that they do have a shortage of their war reserves supplies and materiel.

Senator LEVIN. I asked what they had and you said you did not know but someone else would.

General KROESEN. I don't know the specifics. I know from talking to my NATO allied commanders that they have concerns about their stocks of ammunition.

Senator LEVIN. In terms of our own planning, shouldn't we know whether Germany has 8 days of petroleum or 25 days?

General KROESEN. We know. We have a NATO pipeline which is the basic stock of petroleum, sir. We all know the same thing about the days of supply associated with the pipeline. It supports all nations.

Senator LEVIN. Well, putting aside petroleum, shouldn't we know how much ammunition Germany has on hand, whether it is 3 days or 30 days?

General KROESEN. It is, I guess, a system of mutual trust. We don't go around inspecting each other, checking up on each other. We all have our objectives to reach.

Senator LEVIN. I would trust them if they gave us the figures. I have great trust that they would give us the correct figures. My question is, shouldn't we know in terms of our own planning how many days of ammunition our allies have on hand?

General KROESEN. When I make plans for the employment of the 2d German Corps I do not make it on the basis of how many days of ammunition supply they have on hand. I make it on the basis of the mission I wish for them to accomplish and I presume they will provide the support essential to accomplish that mission. That is a national responsibility, not a NATO responsibility.

Senator LEVIN. It is, but I think whether or not the responsibility can be carried out is very relevant to how much reliance we can put on them, just the way our own ability to fight a war and sustain a war effort is very relevant to our own goals, I think.

I look at these figures as to what we have in our stocks and, again on a comparative basis, compared to what we are doing in some other areas where we are never going to use the items, I think we are making a mistake in priorities to have *x* days in ammunition— *x*-minus. I cannot get into the figures, but a significant number of days below where we should be.

I think we have made a wrong choice of priorities, conventional versus strategic and whether we build B-1 bombers or have more trucks, I think we are making a mistake. But that is not the issue this morning. The issue this morning is whether we should know what our allies have on hand for the same reason, because in making our own projections, our own planning, I think it is relevant as to whether or not they have 8 days of ammunition or 25.

So I am a little surprised to know that is not something you think is important in our own planning.

General **Kroesen**. My knowledge of what the German forces have on hand and the Canadian forces have on hand—and they are those who make up the remainder of CENTAG—has never been one that caused me concern over their ability to go to war alongside of us. And their commanders have the same sense of confidence in their ability to initiate war in Western Europe that I have.

They also have the same requirement for reinforcement. They rely upon the forces coming across the Atlantic and providing the reinforcement.

Senator **Levin**. The figures for the record on the NATO war stock, allies' war stock, I think will be helpful, Mr. Chairman, and again I thank the witnesses. They have been very helpful.

[Additional information follows:]

NATO STOCKS

General **Kroesen**. The only data available within the Defense Department on the fill of our NATO allies war reserve stocks is on petroleum and selected items of munitions. The SHAPE objective for war reserve stockage is [deleted] The US program objective for US Army Forces in Europe is [deleted] for secondary items and ammunition and [deleted] for major items. The following represents the status of NATO Ground Forces for petroleum and selected US munitions and their foreign equivalent as reported in the nations' response to the 1981 Defense Planning Questionnaire (DPQ) dated 14 Dec 81. The Days Of Supply On Hand (DOS OH) is measured against the SHAPE objective of [deleted] and for munitions is computed against the equipment on hand.

PETROLEUM DOS OH

United States (US)	[Deleted.]
Belgium (BD)	
Canada (CA)	
Denmark (DA)	
Germany (GE)	
Italy (IT)	
Netherlands (NL)	
Norway (NO)	

SELECTED MUNITIONS ARTILLERY DOS OH

[8" Howitzer/155 Howitzer]

US	[Deleted.]
BD	
CA	
DA	
GE	
IT	
NL	
Portugal (PO)	
Turkey (TU)	
United Kingdom (UK)	

SELECTED MUNITIONS

[Tank 105 mm/TOW antitank missile DOS OH]

US	[Deleted.]
BE	
CA	
DA	
GE	
IT	
NL	
NO	
PO	
TU	
UK	

SELECTED MUNITIONS MORTARS DOS OH

[4.2 inch, 81mm]

US	[Deleted.]
BE	
CA	
DA	
GE	
IT	
NL	
NO	
PO	
TU	
UK	

Senator HUMPHREY. The subcommittee will now recess for 5 minutes. We will reconvene in executive session to receive classified testimony.

EXECUTIVE SESSION

Let me begin by asking if each of you in turn would care to make a general statement in classified, closed hearing. General Kroesen, is there anything you want to add to your earlier testimony?

General KROESEN. I don't have anything I would add, sir, except to say that we are concerned when we get into the classified testimony about the sustainability of our conventional forces in Europe. [Deleted.]

General WICKHAM. I would just echo that, Mr. Chairman. I do not want to pull back from my conviction that we will win the war if it occurs in Korea, despite shortages. [Deleted.]

Senator HUMPHREY. We see these shortages a lot. How did we get into this situation? Where are decisions made to operate at and beyond the margin in that way? Wouldn't we be better off with a smaller force level and higher materiel supplies and so on?

General WICKHAM. We agreed years ago to provide ammunitions for the Koreans and WRSA is ammunition made available to them for their war reserves. We own it and it would require congressional authority to transfer it to them. That is the purpose for the WRSA program. [Deleted.]

Senator HUMPHREY. General Ross?

General Ross. Yes, sir. [Deleted.]

Senator HUMPHREY. Before you fully deployed the forces?

General Ross. Yes; and, as you notice, I gave you some examples of equipment and the days at which we ran out. That is equipment available to us. That is perhaps not the totality of that available to the Army.

Senator HUMPHREY. Are you saying you would run out of equipment generally before we got the Reserves and the Guard in the field?

General Ross. [Deleted.]

Senator HUMPHREY. Yes, I am aware of that.

General KROESEN. May I address your comment about wouldn't it be better to have a smaller force better supported?

Senator HUMPHREY. Yes.

General KROESEN. It is an age-old question. [Deleted.]

At one time, under pressure from the same kind of thinking—wouldn't it be better to have a smaller force better supported [deleted].

Senator HUMPHREY. I see. Very well. Thank you for your time and your testimony. The record will remain open for 15 days for the submission of requested information. In addition, we would like to submit a number of questions to you in writing that we did not have time to cover today.

[Questions with answers supplied follow:]

QUESTION SUBMITTED BY SENATOR GORDON J. HUMPHREY

AUTHORIZED LEVEL OF ORGANIZATION (ALO)

Senator HUMPHREY. Front line commanders continue to infer that a policy of ALO 2 in their current units is too risky. General Meyer's policy is that shortages must be spread among all commands. Should EUSA and USAREUR be built to ALO 1 at the expense of other units? Is ALO 1 desired as Army policy? Should ALO 1 be programed before force structure growth?

ANSWER. The Army leadership has made a conscious decision to program more units in the force structure than can be manned at Authorized Level of Organization 1 (ALO 1). Thus, as a general rule, the Army is manned at ALO 2 (90 percent of wartime requirements). While not manned at wartime strength, the units can be equipped at wartime strength. This allows the Army to field more fully equipped units than would otherwise be possible. The rationale is that it is easier and quicker to expand and deploy existing units upon mobilization than to activate, man, equip, train, and deploy new units.

As long as the Army's force structure is constrained to less than planning force levels, it makes sense to maximize the number of units fielded by remaining at ALO 2 for the force as a whole. However, within the total force, risk assessment demands that certain units be manned at ALO 1. Therefore, the Army has decided that because of the quick reaction needed and the lack of Southwest Asian allied forces and support assumed to be available, the units of the Rapid Deployment Force-Army should be manned at ALO 1 while other forces remain at ALO 2. The risk to other theaters is deemed acceptable and manageable given the threat and resource constraints that exist.

Additionally, the Army has designed a heavy division (Division 86) which will be manned at ALO 1. The 10 active heavy divisions will transition to this new design during the 1980's.

LOGISTICAL SUPPORT

Senator HUMPHREY. There remains a heavy reliance on reserve components to fill the Army's logistical support requirements. Yet FORSCOM lists major force structure shortfalls in this area. What additional force structure is planned in logistical support?

ANSWER. The Army program includes activation of Active Army combat service support units, such as ammunition, petroleum, water, medical, transportation, maintenance, and engineers, to deploy with the Rapid Deployment Joint Task Force. These additional units will increase the Active Army combat service support needed for the Rapid Deployment Force to about 65 percent by fiscal year 1987. The remaining 35 percent of needed support will continue to be provided by the Reserve Components. This shift of reliance on combat service support units from the Reserves to the Active Army enhances the Army's capability to rapidly deploy and sustain the force during the early days of conflict.

The program also includes activation of Reserve Component combat service support units, such as medical, transportation, maintenance, engineers, chemical, signal, and petroleum, to support the Army worldwide.

FORCE STRUCTURE

Senator HUMPHREY. How are continued shortfalls related to on-going discussions with allies concerning Host Nation Support?

ANSWER. Efforts to reduce support in favor of combat units have trimmed critical support units needed at the onset of hostilities in NATO and to support other contingency operations in other areas. Outside NATO and Korea there is little dedicated Host National Support infrastructure, mandating logistical self-reliance of deploying US forces. To redress these critical shortfalls, the Army is placing reliance on HNS within the bounds of prudent risk. The desirability of HNS, particularly during transition to war when the competition for lift assets is intense, is recognized and accepted. It is also understood that resource constraints impose limits on Army force structure. Nonetheless, there are inherent risks in civil support in combat areas and in the vicinity of priority targets in the rear areas; these risks needed assessment prior to further moves toward increasing HNS.

Formal HNS agreements with Southwest Asia countries, as we know them in Europe, will be difficult to obtain owing to the political climate of the region.

The Army Staff, with MACOM participation, has developed HNS support limits for Europe, Korean and Southwest Asia. HNS beyond these limits is not considered prudent because it reduces flexibility and increases risk.

TRAINING AMMUNITION

Senator HUMPHREY. Debate continues concerning the adequacy of ammunition for training versus greater use of sub-caliber munitions or simulators. What is the (FORSCOM, USAREUR, EUSA) fiscal year 1983 requirement for training ammunition.

ANSWER. The training ammunition requirements for FORSCOM are $513.7 million, USAREUR $358.1 million and for EUSA $26.3 million. The Army's total training ammunition requirement was $1,350.0 million.

Senator HUMPHREY. How was it derived.

ANSWER. The Army's training ammunition requirements are derived by units forecasting needs based on unit training plans considering Army Training Evaluation Programs, individual and crew qualification and familiarization requirements, field training exercises and similar types of field training. Each Major Command collects, reviews and consolidates training ammunition requirements from subordinate units. In turn, Major Command requirements are submitted to the Army's Deputy Chief of Staff for Operations and Plans for consideration. These consolidated requirements are reviewed annually by the General Officer Training Ammunition Authorization Committee (TAAC). The TAAC validates what the Army needs to meet Major Command training priorities considering: Changes in total Army force structure and organization; Weapons system fielding plans; Training devices and simulators fielding plans; Research and Development initiatives in ammunition; and Unit status reports.

Senator HUMPHREY. How much is funded against this requirement.

ANSWER. Current projection indicates $750.0 million has been funded against the total fiscal year 1983 army ammunition requirement of $1,350.0 million.

CIVILIAN PERSONNEL

Senator **Humphrey**. Witnesses listed continuing civilian personnel shortfalls but did not discuss programs or policies which could reduce requirements for civilians. What initiatives are underway to reduce the requirement for civilians?

Answer. The Army has developed a plan to reorient the manpower requirements determination process for Table of Distribution and Allowance (TDA) units where all civilian spaces occur. This reorientation will include the termination of the majority of the current manpower survey program and the initiation of the Manpower Staffing Standings System (MS-3). This new system is based on industrial engineering and other scientific techniques which directly tie objective workload factors to manpower requirements. These processes were successfully tested in the Functional Army Manpower Evaluation (FAME) in the civilian administration function throughout the Army. FAME resulted in a redistribution of civilian spaces in Army civilian personnel offices (CPOs) and is expected to result in the consolidation of approximately 40 percent of these offices. Although no net savings of civilian spaces can be predicted by simply converting to MS-3, conversion will provide a significantly better capability to distribute civilian resources to meet changing needs in the Army and identify organizations and functions which have excess capacity. This type of system already has a history of credibility and success in the Air Force and Navy.

CONTRACTING OUT

Senator **Humphrey**. How much contracting-out will be done in fiscal year 1983 compared to fiscal year 1982?

Answer. As regards the Commercial Activities (CA) Program, the amount of contracting out will depend on the outcome of the cost studies conducted in accordance with Office of Management and Budget Circular A-76.

There are currently 191 cost studies scheduled for completion in fiscal year 1982 and 200 additional studies scheduled for fiscal year 1983. Decisions are based on the method of performance which is most cost effective. Considering all cost studies reaching final decision to date, 46 percent have resulted in contract decisions.

BASE CONSOLIDATIONS

Senator **Humphrey**. What base consolidations have been considered in preparing FORSCOM's budget?

Answer. The FORSCOM budget for fiscal year 1983 includes no new base consolidation initiatives.

AUTHORIZED LEVEL OF ORGANIZATION (ALO)

Senator **Humphrey**. The majority of Army Reserve units assigned to the RDF have very low C-ratings. Some do not even have an Authorized Level of Organization (ALO) sufficient to achieve better readiness. The Army's current policy is to apply special management procedures to "top-off" RDF units before deployment. Why are all RDF reserve units not assigned a uniform ALO rating?

Answer. The Army's goal is to raise the divisional and nondivisional combat untis of the RDF to ALO 1 by 1998. The tactical support units are to be raised to at least ALO 2 by 1988.

Reserve component units are assigned to the RDF based on their Capstone affliation with XVIII Airborne Corps. As the size of the RDF is increased, the newly designated reserve units are authorized to raise their level of organization. Unfortunately, changes do not occur overnight. The Army is aware of the mismatch between requirements and capabilities in some reserve units in the near term and is attempting to rectify the problem.

Increased recruiting emphasis in conjunction with the implementation of the Selected Reserve Incentive Program in March 1981, which was extended to all RDF-A units, has produced a slight trend toward improved personnel strength. RDF-A units will also have the highest priority in implementation of the Full Time Manning Program which should reduce personnel attrition and improve overall strength posture.

In the short term, FORSCOM has an on-going program to redistribute equipment assets to reserve RDF-A units. $100M in fiscal year 1982 OPA funds have been identified to purchase equipment for 1983 reserve RDF-A units. This procurement will fill selected lines of equipment to required levels. Additionally FORSCOM has a dynamic reporting system which identifies specific personnel and equipment shortages in RDF-A units. This program also identifies alternate sources (at installation or higher command level) from which to rapidly fill these shortages prior to deployment.

RESERVE UNITS

Senator HUMPHREY. What are FORSCOM's plans or recommendations for improving the readiness of Reserve units assigned to the RDF?

ANSWER. In concert with the National Guard Bureau, we have developed an intensive management force list which is a single document that establishes our priorities for managing resources. RDF-A units, without regard to component, comprise most of FORSCOM's top priority units. This list in conjunction with the Army master priority list is used to determine allocation of resources to Reserve component units. For example, Reserve component RDF-A units are being filled with equipment withdrawn from Active and Reserve component units not in the RDF-A package.

Force readiness is the management system we use to compensate for shortages of personnel and equipment in the RDF-A units. This system functions as follows:

Equipment not available for redistribution at this time has been identified for redistribution after mobilization of the RDF-A. This planned redistribution will cross-level equipment at the installation where the unit mobilizes and if shortages cannot be made up at the mobilization station the requirement is identified to the Continental US Army for that area. Shortages existing after this stage will be resolved by looking at all non-RDF-A units in Forces Command. Those items still unfilled will be identified to the US Army Materiel Development and Readiness Command. At this time, shortages have been identified and property books of the losing units have been tagged. This program is updated monthly.

The plan for reassignment of personnel will operate in a similar manner except that cross-leveling which cannot be accomplished within Forces Command will be forwarded as a personnel requirement to the US Army Military Personnel Center.

Of urgent concern to us at this time is the inability to call personnel from the Individual Ready Reserve prior to the 100,000 presidential call-up. We have recommended legislation to remedy this problem in past years and wish to once again emphasize the importance of this issue.

7TH INFANTRY DIVISION

Senator HUMPHREY. General Ross, faced with potential budget reductions in fiscal year 1982 the Army had decided to deactivate the 7th Infantry Division. This plan was later scraped after actual cuts did not materialize. What is the Army's policy concerning the future of the 7th Infantry Division?

ANSWER. The Army force requirement to execute the national military strategy far exceeds the current 16 Active—8 Reserve component division force; therefore, we have no intention of inactivating the 7th Infantry Division given currently projected resource level.

If future budget cuts materialize the Army will analyze the magnitude of those reductions prior to determining where to apply the reductions. Readiness and modernization of the current force remain the top priority; any potential reductions will retain that emphasis.

BUDGET CUTS

Senator HUMPHREY. If potential budget cuts again materialize, do you agree with the Chief of Staff that they should come out of Force Structure?

ANSWER. Yes. If budget cuts occur, it becomes a matter of modernization versus force structure and we have chosen modernization. The sophistication of the threat requires we modernize our forces in order for them to survive on the modern battlefield and accomplish assigned missions. To modernize the force, yet stay within congressionally mandated end strengths and budget restrictions, the current program decrements our Active Component combat and supporting forces to levels which provide reduced mission capabilities. This will increase our reliance on the Reserve Components to provide forces for early deployment in support of a variety of contingencies. You should realize we are modernizing with systems which require support from units already operating and staffed at reduced capability levels. To achieve optimum results, the current force should be structured to support the new systems.

Additional budget cuts require either further decrement of the existing Active Component structure to levels which would lead to units becoming mission incapable or removing entire units from the Active Component structure. The latter option places additional high priority requirements on a Reserve Component structure already having problems attaining a mission capable status for early deployment. We are committed to modernizing the current force. It is essential that we not decrement that force to levels which result in our modernization efforts being dilluted.

Senator HUMPHREY. General Kroesen, many observers look to internal competition as a way of measuring the training or readiness of U.S. forces. What emphasis does your command place on international competition?

General KROESEN. USAREUR units participate in nine international competitions, the two most important being the International Boeselager Cup and the Canadian Army Trophy. Our philosophy with respect to international competition has always been that they disrupt normal training, are no measure of the true readiness or competence of the whole force, but that they are an excellent peacetime pursuit which contribute to high morale and esprit de corps among the soldiers and units which compete for the honor of representing the United States. In the past we sent our competitors into matches as normal well-trained crews. The poor showing in past years was the result, and we had to learn to marshall resources, engage in special training, and assure close adherence to special competition practices and procedures. Over the last three years this coordinated effort has resulted in a record of improving scores, a better than representative number of victories, and U.S. teams that have earned the respect of their allies.

I will furnish a table of results for three of our competitions to illustrate the point I made earlier about the need and value of intensive preparation, but let me add also a few points of explanation.

A. Canadian Army Trophy (CAT):

CAT 77:	
1. CA	21,000
2. GE	20,720
3. BE	19,230
4. UK	17,430
5. NL	17,360
6. US	16,100
CAT 79:	
1. GE	39,749
2. BE	36,778
3. UK	34,687
4. US	32,489
5. CA	30,681
CAT 81:	
1. GE	41,770
2. BE	37,577
3. US	35,187
4. CA	34,990
5. UK	34,804
6. NL	30,077

In 1981 only two main gun target hits separated second and third place, only one target hit separated third and fifth places. The higher score of the first place German team was the result of a second run by one of their platoons in which all 18 main gun targets were hit. No other platoon in the competition accomplished that and the bonus effect moved the Germans from second into first place. The platoon was authorized a second run because of target operators' errors on their first run.

B. Boeselager Cavalry Cup.

1979: 9th of 9 guest tms, 20th of 20 tms overall.

1980: 2d of 11 guest tms, 8th of 23 tms overall.

1981: 1st of 11 guest tms, 3d of 21 tms overall.[1]

Germany enters 10 teams, the other nations one or two each and the competition is conducted in two classes, the Germans amongst themselves, the Allies separately. There is no overall trophy, but the overall standings, as in the Olympics, assume international importance. In 1981, the U.S. team needed only 15 points, less than 1 percent to tie the leading German team. No guest nation has ever before been close. The other participants are: Netherlands, Belgium, United Kingdom, France and Canada.

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[1] 1st Place: GE 1590, 2d Place: GE 1585, 3d Place: US 1575.

C. Minuteman.
1979: (1) NL—Reserve, (2) GE—Reserve, (3) GE—Reserve, US—5 of 13.
1980: (1) GE Polizei, (2) NL—Reserve, (3) GE—Reserve, US—16 of 28.
1981 :[1] (1) US—Reserve, (2) US—Reserve, (3) GE—Reserve.

INTERNATIONAL COMPETITION

Senator HUMPHREY. Many observers look to international competition as a way of measuring the training or readiness of U.S. forces. What emphasis does your command place on international competition?

ANSWER. With regard to military skills competition EUSA indorses the idea and is exploring with the Combined Forces Command the possibility of developing competitive events in selected military skills such as TOW, small arms marksmanship, and artillery gunnery. Recreation and sports programs operated by EUSA do not encompass individual or team competition at the international level. EUSA does nominate athletes for all-Army level competition in individual and team sports. Individuals from EUSA selected for all-Army level competition may in turn be selected by HQDA for interservice level competition.

Senator HUMPHREY. How have U.S. forces fared in such competition?

ANSWER. Most U.S. Armed Forces athletic competition at the international level is under the auspices of Conseil International Du Sport Militaire (CISM). Selection of military athletes to represent the United States in CISM competition is the responsibility of the Interservice Sports Committee Secretarist, a DOD activity located in Washington, DC. CISM competition includes volleyball, basketball, boxing, track and field, wrestling, judo, and taekwondo. CISM competition in taekwondo was held in Seoul, Korea, in October 1980. United States representatives in the competition were selected from EUSA military personnel. The United States team finished second out of 15 teams with the Republic of Korea winning the competition.

M1

Senator HUMPHREY. Generals Kroesen and Ross, the M1 Tank program continues to be controversial in the Congress because of its cost and alleged technical problems. M1's are now being sent to active units. How is the M1 being received by the troops?

ANSWER. The acceptance of the M1 in the field has been enthusiastic to say the least. To bear this out, those units equipped with the M1 have experienced positive trends in those factors most indicative of unit morale—reenlistment rates have sky rocketed and Absent With Out Leave (AWOL) rates are nil. Although these are not conclusive, they are indicators—frankly, the troops are excited.

Senator HUMPHREY. What problems are being encountered in the field?

ANSWER. Fielding has not been trouble free. There are problems. However the problems are of such a nature that the Army will solve them. They are primarily attributable to the maturation of a new front line weapon system. We are also fielding the M1 Tank in a new organization which will make it even more effective. Our most significant problem is teaching our leaders, both commissioned and non commissioned officers, how to best employ and maintain this new system. There are not now any problems significant enough to change our fielding plans.

QUESTIONS SUBMITTED BY SENATOR ROGER W. JEPSEN

DOCTRINE

Senator JEPSEN. Recently the Army has made some fundamental changes in its operational doctrine in such studies as Air-Land 2000 and the new 100-5 manual. The new doctrine emphasizes maneuver style warfare over static attrition warfare. This change in doctrine will no doubt have an impact on planned O&M, readiness and sustainability planning as greater importance is placed on combat support and combat service support in the successful execution of operations. What impact will the new doctrine have on your planned O&M and WRS requirements?

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[1] 1st and 3d Place individual .45 Cal pistol and M16A1 rifle. 1st and 2d Place overall Individual Best Small Bore Rifle and Pistol (.22 Cal). Team standing based on M16A1 rifle and .45 Cal pistol combined scores. Participants included a total of 47 teams representing five European nations and the U.S.

ANSWER. Based on the strategies involved, our concept of war reserves will have to be altered. In addition to the traditional war reserves needed to sustain our combat forces fighting on the forward edge of the battle area (FEBA), we also will have to develop [deleted].

These plans are now in the conceptual stage and will need further indepth study before firm recommendations can be formalized.

Senator JEPSEN. Airlift and sealift requirements from CONUS in the event of war?

ANSWER. Change in doctrine will have little effect upon present airlift and sealift requirements for resupplying contingencies. These capabilities are, [deleted].

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

CHEMICAL ENVIRONMENT

Senator WARNER. Generals Kroesen and Wickham, what do you regard to be the state of your respective forces to conduct military operations in a chemically-contaminated environment?

Generals Kroesen and Wickham, what do you think the prospects would be of them having to do so in a combat situation instigated by the Soviet Union or its proxies?

General KROESEN. a. The combat forces in Europe are equipped and trained for surviving a chemical attack. They [deleted] in a chemical environment, but I believe the combat troops are satisfied with their survivability. The same is [deleted] because the press of day-to-day activities limits training time and attention to the problem. We have found besides, that chemical training is [deleted] because this training is very complex, requires stringent procedures and a great deal of practice. We are not comfortable with our state of chemical readiness.

b. I think it is quite likely that we will be faced with a chemical attack if we go to war with the Soviet Union. Given their current state of training and stocks of chemical supplies, [deleted] it seems to me that they could not afford not to capitalize on the very definite military advantage which chemical attack will offer unless of course they intend in the end to observe the international ban on such weapons.

General WICKHAM. (a) EUSA ability to operate in active chemical environment in ROK is [deleted]. Combat sustainability is [deleted]. Programs have been initiated to alleviate these problems. Additional chemical defense equipment for military personnel, [deleted].

(b) Indications are [deleted].

CHEMICAL DEFENSE

Senator WARNER. Generals Kroesen and Wickham, how would you rate your forces' chemical defensive posture today? What about that of units designated to reinforce your troops in the event of a war and/or mobilization. How long could your forces maintain an effective chemical defensive posture and at what cost in terms of operational readiness and combat effectiveness?

General KROESEN. My overall rating of our forces' chemical defense posture [deleted]. Our ability to survive and continue operations [deleted]. For units directly attacked, continuing effectiveness is measured in hours. For the command as a whole, continuing effectiveness will be a function of how widespread is the attack on units and how effective is the enemy exploitation of those units and the areas they control. I am not a spokesman for the readiness of our reinforcing forces, but I will say that the units of the active Army which participate in REFORGER are generally trained about the same as ours, [deleted].

The chemical defensive posture of units designated to reinforce USAREUR troops in the event of war and/or mobilization is not a satisfactory level. Although much progress has been made in raising the level of readiness as it relates to NBC Operations, there is much room for improvement. Training and equipment shortages, while not totally unacceptable, are considered to be problem areas. For example, chemical defense equipment (CDE) on hand is approximately at 53 percent for reserve component units and when outstanding requisitions are received, that percentage will be raised to 83 percent. A unit cannot conduct realistic and meaningful training with only one-half to three-fourths of authorized CDE equipment on hand, active component units are at the 84 percent level of fill for CDE AN9 upon receipt of equipment on requisition will be at 88 percent. Newly activated chemical units are experiencing significant shortfalls of tactical wheeled vehicles and radios due to a shortage in the supply system. Receipt of these items is not anticipated until the 84-86 time frame.

General **Wickham**. Training of combat forces is good, but [deleted]. Chemical defense posture of active Army units designated to reinforce the ROK is believed to be similar [deleted]. In-place forces could maintain an effective chemical posture for upwards [deleted] noted that our situation, [deleted]. They have long range programs [deleted].

Senator **Warner**. Generals Kroesen and Wickham, what is your professional judgment about the degree to which further improvements to our chemical defense posture alone can be relied upon to deter the Soviet Union or its allies from initiating chemical attacks upon American personnel?

General **Kroesen**. As long as Soviet forces can support their tactical operations with chemical weapons without being placed at equal risk of having to operate in the same environment, our forces will be susceptible to an attack which [deleted]. No amount of defensive effort changes that fact and no defensive measures can add a deterrent effect. An effective defensive posture must be underwritten by an unquestionable retaliatory capability if we are to have any deterrence at all.

General **Wickham**. Improvements in chemical posture are necessary to save lives and reduce degradation of military performance on a chemically contaminated battlefield. [Deleted.]

[Deleted.]

It is essential that the US maintain a capability to "fight back" with chemical weapons—in addition to improving our defense—so we can force an adversary to fight while also encumbered by protective equipment and compel him to consider the adequacy of his own defense prior to initiation.

CHEMICAL DETERRENT

Senator **Warner**. Generals Kroesen and Wickham, to what extent would you believe that a credible retaliatory capability is essential to an effective chemical deterrent? How would you characterize the present US chemical stockpile and its availability and utility to you as a theater commander in the event you should be compelled to use chemical weapons to respond to their use by the enemy?

General **Kroesen**. Availability of chemical weapons/delivery systems with the necessary ranges and choice of agents is critical to deterrence and possibly to survival. An enemy considering use of chemical weapons must clearly understand that he will pay at least the same price in casualties and degradation of operations as we will. Our present theater stockpile [deleted]. Presently we can introduce chemicals to a range of [deleted] from the forward line of troops, capability which ranges only the [deleted]. Our limited quantities of chemical weapons make [deleted]. We need the capability to [deleted].

General **Wickham**. As stated earlier, [deleted]. The US needs the safest, and smallest, stockpile necessary to deny a significant military advantage to any chemical warfare initiator. [Deleted.]

BINARY MUNITIONS

Senator **Warner**. Generals Kroesen and Wickham, is it your professional military judgment that binary munitions would provide significant and needed improvements to our present chemical deterrent capability and that the introduction of these weapons is an urgent national defense priority?

General **Kroesen**. I believe that production of binary munitions is the first step in attaining a credible deterrent. From a political and storage standpoint, binary munitions are a significant improvement. Tactically, we must equip with the binary chemical capability such weapons as [deleted]. We strongly support the development and fielding of the Air Force's Big Eye VX bomb, and we do believe that the introduction of a credible CW capability, [deleted] is a most urgent national defense priority.

General **Wickham**. These weapons are [deleted]. They are our best hope for a substantial and effective chemical deterrent capability.

NUCLEAR RESPONSE

Senator **Warner**. Generals Kroesen and Wickham, do you believe that, under present circumstances of U.S. chemical unpreparedness, you would be compelled to advocate the use of nuclear weapons to respond to a Soviet or Soviet-proxy attack which employed toxic chemical agents?

General **Kroesen**. This is a very complex question which I cannot answer as a yes or no proposition. [Deleted.]

General **Wickham**. [Deleted.] The battle in Korea is intended to be non-nuclear. To win a chemical war, we must improve our chemical warfare capabilities, both defensive and offensive, sufficiently to deny any significant military advantage an enemy would gain from using chemical weapons.

Senator **Warner**. General Kroesen, recognizing that immediate in-theater availability of weapons like enhanced radiation devices and chemical weapons is, from a CINC's point of view, most desirable, stockpiling of these munitions in the United States, ready for rapid deployment to your theater, is a necessary and acceptable second-choice in the light of our allies' domestic political problems?

General **Kroesen**. I believe the forward storage of enhanced radiation and chemical weapons is important to deterrance. Stockpiling them in the United States as a second choice is only a distant second, because the shipping requirements for tons of ammunitions at the same time we are trying to deploy reinforcing forces is not an attractive factor to contemplate.

LONG-RANGE TNF PROGRAM

Senator **Warner**. General Kroesen, what importance do you attach to the implementation—according to the multilaterally agreed-upon plan and schedule—of the long-range theater nuclear modernization program?

General **Kroesen**. The TNF Modernization Program is vital if we are to have a nuclear force that is survivable, flexible, and redundant enough to assure the nuclear support we need in war and a credible system of sufficient potency to assure continued deterrence in peace. I believe, as in the case of chemical weapons, that a retaliatory capability of equal effectiveness is the best guarantee that a weapon of this type will not be used.

Senator **Warner**. General Kroesen, have you given consideration to the question of whether or not we might be better served by seeking the elimination of other theater nuclear weapons systems rather than these long-range weapons?

General **Kroesen**. None whatsoever. I have no objection to the removal of any weapons so long as we are assured of a mutual reduction and a continuing residual capability to defend the West. I have seen no proposals which promise such a mutual reduction while at the same time assuring that other weapons or our conventional forces will be provided the strength required to guarantee a successful defense.

Senator **Warner**. General Kroesen, in your personal, professional opinion what are the implications for United States and NATO security of achieving a total ban of SS–20s, SS–4s, and SS–5s, in exchange for a ban on GLCMs and Pershing IIs, if we fail to reach a limitation on, or the elimination of, SS–21s, –s22s, or –23s?

General **Kroesen**. [Deleted.]

QUESTIONS SUBMITTED BY SENATOR CARL LEVEN

Senator **Levin**. General Kroesen, what are the alternatives to this prepositioning of sets 5 and 6 which would give the Army more flexibility to meet non-NATO contingencies? Is this more desirable than going ahead with POMCUS sets 5 and 6?

General Kroesen. The alternatives to POMCUS include the extreme proposals of either [deleted]. More reasonably, one could increase the transportation means available, either air or sea, and promise a more massive delivery of reinforcing units in a shorter period of time. In my opinion, none of the alternatives proposed is a satisfactory substitution for POMCUS and none provides a better way of [deleted]. From the USAREUR point of view, we support Division Sets 5 and 6 and we support an increase in the transportation capabilities of the Military Airlift and Sealift Commands. It is not as though Divisions 5 and 6 are the only forces to be transported or that once they are available [deleted]. We need hundreds of combat support and combat service support units, thousands of replacements, and an enormous tonnage of supplies and equipment in addition to those divisions. [Deleted]. So, in answer to the second part of your question, I find no alternative that I would label "desirable".

POMCUS

Senator **Levin**. General Wickham, as commander of U.S. troops in Korea, a possible non-NATO contingency we worry about and one which might require reinforcements from the U.S. is a Soviet invasion of Southwest Asia. Do you think it would be better to build these additional POMCUS sets in Europe? Would you worry about the loss of this flexibility?

ANSWER. POMCUS sets 5 and 6 are intended to provide the capability of meeting the D-day requirement for U.S. Army divisions in the absence of adequate strategic lift. I believe Gen. Kroesen supports POMCUS sets 5 and 6 as well as an increase in the transportation capabilities of the Military Airlift and Sealift commands to improve our ability to reinforce Europe. However, a shortage of equipment for both Active and Reserve Component Forces exists in FORSCOM and this fact argues against diverting needed equipment from units for POMCUS. I defer to the Chief of Staff and Gen. Kroesen the issue of how best to provide for the reinforcement of Europe. It is clear that our Airlift and Sealift Forces must be increased/improved if we are to attain the flexibility to which you allude.

Senator LEVIN. General Ross, Forces Command is the source of all these reinforcements. Would putting POMCUS sets 5 and 6 in Europe restrict your flexibility? If so, why should we do it?

ANSWER. The decision to increase the POMCUS force by two division sets (5 and 6) does not restrict FORSCOM's flexibility to provide forces under the current family of plans. Unforeseen contingencies, or a change in scenario priorities at the National Command level may require more flexibility than a six division POMCUS force permits. If either occur, the United States should retain the option to reallocate force resources to meet the immediate threat.

Senator LEVIN. Would your forces be negatively impacted by the need to fill the sets with equipment? How?

ANSWER. Equipment fill for Division Sets 5 and 6 can have a negative impact on CONUS based forces. The severity of impact will be determined by the method of fill used. If the sources of equipment were the units designated to fall in on the sets (that is, the units are drawn down in equipment to fill the sets), the impact would be significant in the training and readiness areas. On the other hand, if the sets are filled from the wholesale system there would be a more subtle impact by reducing the CONUS unit's priority of fill (DAMPL) and thereby delaying delivery of equipment to them. Since the Army terminated the withdrawal program in 1981, the impact will be felt through the wholesale system distribution plan only. The impact on fielding modernization systems is the delay in completion of the program because POMCUS sets must be modernized at the same time as the CONUS unit.

WAR RESERVES

Senator LEVIN. General Kroesen, General Wickham, and General Ross, are you satisfied with your current levels of war reserves? What are the major deficiencies of your current war reserve stocks? How will your war reserve stockage levels improve with the fiscal year 1983 budget?

General Kroesen. We have provided the table which identifies our current stockage levels, and I believe it is apparent that I cannot be satisfied with those levels. The inability to sustain a force in combat is tantamount [deleted] unless and until we provide them the means assuring sustainment. I would not single out any classes of supply as being our major deficiencies, all are critical to sustainment of the force, all are far below our objectives and all are worrisome shortages. I am not yet aware of the specific improvements now included in the fiscal year 1983 budget, but I know that these needs have received attention and that some progress should be made in 1983.

General WICKHAM. Current war reserve authorized levels [deleted] are satisfactory. However, fill of these levels is [deleted]. As an example, we have only [deleted]. In the area of war reserve stocks for allies (WRSA), we also are authorized a level of [deleted] war reserve stocks including tactical wheeled vehicles, armored personnel carriers, night vision devices, communications equipment, and CBR clothing and protective equipment. [Deleted.] Increased funding anticipated in the fiscal year 1983 budget should result in [deleted]. However, [deleted] fill of [deleted] this category will entail substantial procurement lead time for most items. Our stockage of Army stock funded repair parts in U.S. war reserves should show more significant improvement, with an anticipated fill [deleted].

General Ross. No. Major shortfalls in FORSCOM war reserves are: [Deleted].

DA has identified $1.1 million dollars of stock fund fiscal year 1983 war reserve obligation authority to FORSCOM. The FORSCOM deficiencies ($11 million) for war reserve assets (stock fund) maintained at FORSCOM stations will be decremented by the funding provided.

Senator **Levin**. During our first full committee hearing, CJCS General David Jones said the approved sustainability program could be achieved earlier and that this was made desirable. Do you agree? How? (Particular yearly funding)

Answer. Yes, I do agree. The 5-Year Defense Plan achieves objectives for sustainability through a steady build-up by the end of the [deleted]. Funded Delivery Period. Although it may be desirable to have increased sustainability sooner, consideration must be given to maintaining balance to other Army programs as well as maintaining warm production bases where practical.

U.S. FORCES ISSUES

Senator **Levin**. I understand that the Germans have agreed to provision of some 93,000 reservists for wartime host nation support. Yet, there were seven other U.S. Forces initiatives for peacetime—such as the Master Restationing Plan which were part of what was known as the Stoessel Demarche. I understand there has been little, if any, progress in reaching agreements in these areas, which include family housing, environmental easements, et cetera. Would you agree with this negative characterization?

Answer. The Stoessel Demarche was modified in July 1981 by a letter from the Secretary of State to the Foreign Minister of Germany. In that letter the U.S. proposed to focus on three issues: Issue 2 Master Restationing Plan, the movement of three brigades forward; Issue 3 Family Housing associated with the three brigades; and Issue 7 Base Support at the three Master Restationing Plan sites. Several discussions have been held with German officials resulting in the appointment of a group of representatives from both sides. We have agreed to meet in the near future in Washington to begin discussion.

Note.—The meeting was held on March 17, 1982. At that time the Germans were presented with the details of our requirement. They were forthcoming and signed on agreement to establish a joint committee of experts. This committee will identify the problems connected with restationing, points of agreement and disagreement. The issues of disagreement are to be studied jointly, in order to develop proposals for alternative solutions, which are to be presented as soon as possible to the competent bodies of both Governments for their consideration. The committee will meet within 45 days of the signing of the agreement.

Although progress as of February 23, could be characterized as slow, the results of the March 17, 1982, meeting are very encouraging and we look to future meetings with cautious optimism.

MUTUAL DEFENSE

Senator **Levin**. General Kroesen and General Wickham, how can the Congress support your efforts to convince the allies to contribute more for our mutual defense?

General **Kroesen**. Sir, in my opinion, the Congress can support such efforts by supporting fully our requirements for construction, for maintenance and repair of our facilities, and for procurement of the equipment needed for the Army in the field and for POMCUS sets 5 and 6. Such commitments set an example which I can point to in my discussions with NATO leaders when I talk about the long term commitment of the United States to the freedom of Western Europe. I believe that setting an example is the most effective means we have of encouraging the Europeans to remain strong in their own right.

General **Wickham**. The positive support of U.S. forces by the Republic of Korea Government ranks among the best of any U.S. ally. Financial contributions for warfighting related construction is noteworthy and supportive within economic constraints. The Republic of Korea Government has established a record of being receptive to supporting logistical shortfalls through agreements. During peacetime force structure offsets and Korean Augmentation to the United States Army (KATUSA) augmentation as well as peacetime enhancements/continuing support and cost-free real estate realize nearly [deleted] in annual savings and cost avoidance. [Deleted.]

Recognition of this cooperation is important in the mutual defense efforts provided by this newly industrialized country.

PERSIAN GULF

Senator **Levin**. General Kroesen and General Wickham, what impact would our going to war in the Persian Gulf with the Rapid Deployment Force have on your ability to carry out your missions to defend NATO Europe and South Korea—beyond just the provisions of any troops under your command which also are designated for the RDF? How would you expect your forces and capabilities and facilities to be involved? In those areas where there would be a negative impact, have our allies done anything to compensate in terms of improving their own defense capabilities? Which have, and which should but have not? What can be done to encourage them to do so? What remains to be done? Why have these allies been reluctant to do so?

General **Kroesen**. a. The ability of USAREUR to carry out its mission if the RDF is deployed in a contingency operation will depend entirely upon the ability of the Army to reinforce USAREUR and provide the supplies that will sustain the Army in combat. There is no question that such reinforcement will be more difficult, will perhaps be delayed, and that the risks associated with war in Europe under those conditions will be grave.

b. USAREUR forces are not included in any RDF troop list or task organization, so I foresee USAREUR involvement as only peripheral, perhaps supplying certain equipment or soldiers for which there are critical shortages, supplying intelligence or communications capability that we have already in the theater.

c. The most significant compensating action taken to date, of course, is the German agreement to provide Wartime Host Nation Support. This step assures USAREUR of the services of 50,000 German reservists in platoon, company, and battalion size units, for jobs that American soldiers otherwise would have to do, soldiers who would have to be deployed from the United States. We have other agreements which promise German rail and highway transportation, communications support, etc., which also alleviate our existing combat service support shortfall. We are working on the same kinds of agreements with the British, Dutch, Belgian, and Luxembourg governments and although no formal agreements have been signed, statements of principle have been or are expected to be signed with each of these countries. In answer to your last question, they are reluctant to do more first because it costs too much and second because I do not think they are sure of what we want. We have not presented a specific request to any nation except Germany outlining our needs and requesting their assistance.

General **Wickham**. [Deleted.]

However, any diversion of allocated transportation assets or combat support/combat service support would delay [deleted] arrival of scheduled augmentation forces assisting in defense of the Republic of Korea (ROK). The ROK Government presently provides, as Host Nation Support, over [deleted] in peacetime support. Included are savings offset by continued support, cost-free real estate, and benefits provided to service members of USFK. Additionally, over [deleted] has been or will be provided in direct contributions to warfighting capability construction projects through calendar year 1987. [Deleted.] Force improvement projects by the ROK Government during calendar year 1982 are programed for [deleted] to acquire modern tactical aircraft, upgrade tactical air control systems, acquire modern artillery and tanks, and improve antisubmarine and unconventional warfare capabilities. Most of that is procured from the US. As an example [deleted] the ROK Government will pay the US Government and contractors about [deleted] for defense products procured from US sources. [Deleted.] While the [deleted]. Their efforts are a glowing example for other allies and deserve U.S. support in the form of increased FMS loans with more favorable repayment terms.

Senator **Levin**. General Kroesen, your statement discusses shortages in your units' wartime authorized strength. In light of these shortages, are you satisfied with the Army's end strength request of 783,000 for fiscal year 1983? In your opinion, does it make sense to hold down the growth in the size of the Army, particularly in light of the favorable recruiting environment we find ourselves in?

General **Kroesen**. My answer to this question always includes a reference to the Army of 1965 when 970,000 soldiers were an inadequate number to fill all of the structure we would like to have had. We had 16 divisions then and we have 16 now. So I think we are at least 190,000 soldiers short of our needs today. The most critical shortages in Europe are the strength needed to fill the current structure to wartime levels and the additional structure needed to meet our combat service support requirements.

READINESS

Senator **Levin**. General Kroesen, General Wickham, and General Ross, what changes or improvements, if any, are there in the readiness of your troop units reported this year under the Unit Status Report compared to a year ago? In your opinion how many days a year does an infantry battalion need to spend in the field to maintain its readiness posture? How should we measure the output of such exercises compared with the imput we authorize–the money we appropriate?

General **Kroesen**. a. During the past year the status of units in Europe [deleted]. In December 1980, [deleted] of our units met their ALO requirements. In December 1981, the figure was [deleted] the low point of the year, but one reached also during the previous three months. The primary cause of this [deleted] has been a developing shortage of non-commissioned officers, a shortage which impacts on training readiness as much as it does with strength figures. We have also had a slight [deleted] in our logistics reports, probably a reflection that our equipment is one year older and requires an ever increasing maintenance effort and repair parts cost.

b. The number of days an infantry battalion must spend in the field is a variable affected by the kinds of training areas available, the training facilities, i.e., ranges, combat theaters, terrain models, simulation devices, etc., and the skill and professionalism of its leaders. Our training guidance specifies that battalions will go the field for battalion exercise once a quarter for approximately one week. It also specifies that battalions will train themselves to conduct an attack, to prepare a number of different kinds of defensive positions, to be able to conduct delaying operations, lay mine fields, fight in build-up areas and in forests, fight in cold weather and under conditions of a chemical attack. Different battalions need different amounts of time to accomplish these things and many others. The only way I know for you to be satisfied with the product which your investment supports is to assure yourselves that you are satisfied with our training aims and objectives and then to visit some of our units and try to assess directly your impression of their professionalism. There is no statistical analysis, no scoresheet which will tell you in advance whether the Washington Redskins will win their next game. Since we in USAREUR know that our next game may be our last, we are determined to be as ready as possible and to spend our funds as effectively as possible for that end.

General **Wickham**. (a) Overall, EUSA unit readiness has improved [deleted] since last year. Equipment on hand (EOH) statistics have improved slightly [deleted]; real combat improvements have occurred in equipment readiness (ER) due to force modernization upgrades—ER and equipment status (ES) improved by [deleted]. Personnel readiness in combat and combat support units improved [deleted] and, [deleted] in combat service support units. Improvements are the result of two primary factors—Congressional support of Army modernization; and continued, intensive management at all command levels.

(b) Infantry battalions of a forward deployed division, such as 2ID, spend approximately 150 days a year in the field to maintain readiness posture. EUSA measures output of such training exercises in terms of capability to meet and defeat the real world threat across the DMZ. This output includes reaction time to be in battle positions with all necessary personnel and operational equipment to defeat the anticipated threat. Exercises are developed around possible scenarios that allow measurement of unit readiness posture. If standards are not met, additional training is conducted, e.g., more days in field to achieve training objectives.

General **Ross**. Statistically, we show a decline but that is somewhat misleading. For example, a unit does not normally report an overall C-rating that is higher than any separate measure of personnel, equipment, or training readiness. Even some of these separate functional areas have subcategories, the lowest of which determines the rating. The Commander, however, may subjectively upgrade the overall rating based on his judgment and assessment of the level of morale, esprit, skill, experience and other factors vital to combat readiness. In the area of personnel, we see a healthy improvement across the board, but at the same time their structured or required strength has grown by more than 6,700 while our personnel authorizations were only permitted to go up a little over 1,700. Thus, the statistical decline in personnel is a reflection of strength limitations and not a degradation of the quality of our people. We see the same thing in equipment. Units are restructured, equipment requirements go up, but our stocks are exhausted and the C-ratings go down for lack of equipment. The other measure of equipment is servicability ratings. Our units are charged to maintain well the equipment entrusted to their care and they do a good job, sometimes expending extraordinary effort to keep equipment, which in many cases is older than the operator, running. Our concern is not the maintenance percentages reported by our units; rather, our concern is the sustainability of the items. Under normal conditions, we weigh the age of the equipment against the cost to maintain it and wash it out of the system when the costs get too high. We can't do that any more. Our stocks are exhausted. In summary, our personnel readiness has improved; our equipment readiness has declined.

(b) Ideally, each battalion should go to the field from five to seven days per month. The training conducted should be as a combined arms team, and is the culmination of sub-element field training. The minimum acceptable time in the field as a "battalion team" is twice each quarter for a period of five to seven days per exercise. Total annual field training as a battalion team is from 40 to 55 days. While there is a correlation of time in the field and the training dollars available there is no cause and effect relationship between the amount of time in the field and the level of training proficiency of a battalion. The tasks, conditions, and standards as set forth in the unit's ARTEP, establish what a unit is expected to do. How well the unit actually performs these tasks is a matter of numerous evaluations, both internal and external. These evaluation results and the subjective judgment of the experienced battalion and brigade commanders are a matter of record in the form of the Unit Readiness Reports. In addition, the status of unit training is an item of interest for General Inspections, command inspections/visits, and reviews by AAA and GAO.

UNIT TRAINING

Senator LEVIN. There is a proposal being considered by the Military Reform Caucus to either double the amount of funds available to each Service for unit training or to significantly increase it. Are such increases needed, how much and for what types of exercises?

ANSWER. Although additional dollars in the fiscal year 1983 budget would allow some units to exercise more often, there are other demanding requirements that have a major impact on training which should be considered for increased budgetary support. For example, the shortage of combat arms NCOs and continued personnel turbulence have been the biggest training constraints reported (Unit Status Reports) over the past two fiscal years. Although initiatives are being developed to eliminate these constraints and thereby improve unit training, they require support not only in the training account for such things as expanding the Noncommissioned Officers Education System (NCOES) schooling system in the training base, but also increase support in various non-training accounts of the Army budget.

Senator LEVIN. Can these funds be used efficiently and how would you prepare to use them?

ANSWER. To be balanced properly the training equation requires fixes to many key variables beyond the unit training account. Before we significantly increase resources for unit training we need to fix the training environment: continued improvement in the numbers and appropriate grades of combat arms NCOs; improved unit stability and cohesion; improved and expanded training areas and ranges; more and updated equipment with which to train both in the Active and Reserve Components; Reserve Component training closer to home station; and increased availability of selected items of training ammunition, simulators and devices.

MODERNIZATION

Senator LEVIN. From our vantage point of the Defense budget and programming process we have heard a great deal about the Army's modernization. Army witnesses have testified about the need to ensure that when the new equipment arrives at the operating unit the adequate support costs in training and maintenance have been met to ensure that the troops can use and maintain the equipment.

My question for all three of you is: How is the modernization process working at the field level? Is it working as it is supposed to, and as we are being led to believe that it is?

ANSWER. The Army is not without problems in trying to insure that new equipment is totally supported when it is introduced to the field. While we have made great strides in programming and budgeting for modernization, recent internal inspections have revealed the Army is experiencing difficulty in ensuring "total system fielding."

"Total system fielding" is an Army Modernization goal to simultaneously field with each new item of equipment all necessary and properly trained operator and maintenance personnel, required support equipment (e.g., trucks, generators, radios, test equipment, special tools), publications, ammunition, repair parts and training devices, and facilities. The introduction of a single major new item of equipment is a significant undertaking in terms of the detailed planning and programming that must take place. The simultaneous introduction of scores of new items of equipment poses a significant challenge for the Army.

Experience has shown the Army is experiencing shortcomings in "total system fielding." These shortcomings can be summarized in terms of information flow, procedural guidance, accurate documentation of total requirements and staffing for modernization management. The Army has learned from its mistakes and has initiated a detailed planning process to preclude many of these shortcomings.

Senator. **Levin**. Are sufficient resources included in the O&M budget in fiscal year 1983 to adequately support the introduction of these systems?

Answer. The bulk of real growth in O&M appropriation is the support of new or modernized equipment being fielded in fiscal year 1983. The Army uses a unique programming system to estimate support requirements for force modernization to insure that funding requests reflect requirements accurately. The fiscal year 1983 O&M budget includes resources to adequately support the fielding of 153 materiel systems.

Senator **Levin**. In each of the outyears of the 5-year plan identify shortfalls in each yearly system and dollars.

Answer. The Army bases outyear resource programming for force modernization on the latest distribution schedules. Outyear programs are updated annually to reflect changes in distribution. Therefore, specific outyear shortfalls can't be identified since estimates are changed based on distribution.

Senator. **Levin**. Are sufficient safety margins built into such accounts to compensate for unexpected technical and support problems with these systems?

Answer. Not specifically, however, the Army's programming process, which updates resource estimates annually will accommodate unexpected technical and support problems.

Senator **Levin**. General Kroesen, some in Congress are discussing a proposal to delay procurement and fielding M-1 tanks while testing them further against M-60 tanks. Do you think such tests are necessary and why or why not? Would delay in procurement and fielding the M-1 tank decrease our Army's ability to defend Europe?

General **Kroesen**. a. I am not an expert on the M-1 tank. We have had it in Europe for less than six months, and although all reports and all soldiers associated with the tank substantiate its reliability and overall effectiveness, I cannot prove that it is the best tank in the world. I can say, however, that I see no need whatsoever to test again the M-1, to compare it to the M-60 or for any other purpose. The facts concerning every test demanded during its development are available. These facts provided an adequate justification for the Army to proceed with procurement, and all the disinformation being dredged up by newpapers, systems analysts, college professors, or Congressional staffers based on statistics that are years old does not change my belief that we need and want the M-1 in Europe as fast as you will buy it for us. I am against further testing because I see nothing left to prove.

b. Delaying procurement is probably not a crucial factor in winning or losing in the defense of Europe. It may be a crucial factor in whether some soldiers perform at their highest efficiency, because the M-1 will allow them to be more effective as members of a tank crew. It might even determine whether some of them live to see the end of the battle. There is a certain technological edge provided by the M-1. If we can't afford to provide that edge, the Army will go to war with what it has. If we can afford it, no trumped-up excuse for more testing will justify, morally, a delay in making the M-1 available.

REDUCED BUDGET

Senator **Levin**. General Kroesen, General Wickham and General Ross, if Congress decides to reduce the rate of increase in the fiscal year 1983 defense budget request, what programs or activities under your command, in rank order, would you reduce from the level DOD requested in the fiscal year 1983 budget?

General **Kroesen**. The budget request submitted by USAREUR was a balanced request designed to provide for improvements in the living and working conditions of soldiers and their families, to train and prepare the Army for war if our deterrence fails, to sustain the Army in combat, and to modernize our forces by introducing new equipment, new organizational structure, and the new facilities associated with this modernization. In general [deleted].

General **Wickham**. Reductions would first be directed at peacetime base operations and support functions. [Deleted]. It should be recognized that [deleted].

General **Ross**. I can not provide a specific Rank Order of activities which would be reduced if Congress were to reduce the rate of increase in the fiscal year 1983 Defense Budget. The activites that would be affected would depend on whether the rate reduction is applied to investment or operation appropriations and on how DOD and DA applies the reduction to the services and major commands.

Senator **Humphrey**. Thank you very much. The subcommittee will stand adjourned.

[Whereupon, at 11:55 a.m., the subcommittee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

FRIDAY, FEBRUARY 26, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

AIR FORCE OPERATIONAL READINESS

The subcommittee met in open session, pursuant to notice, at 10:05 a.m., in room 212, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senators Humphrey, Goldwater and Levin.

Staff present: Michael B. Donley, professional staff member; and Carol J. Rudolph, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; George Kohl, assistant to Senator Humphrey; Robert Nichols, assistant to Senator Jackson; and Peter Lennon, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony on the operational readiness of Major Air Force Commands.

We are pleased to have with us General Bennie Davis, Commander of the Strategic Air Command; General James Allen, Commander, Military Airlift Command; and General Wilbur Creech, Commander, Tactical Air Command.

During consideration of the revised 1981 and 1982 budgets this subcommittee's main concerns were focused on depot maintenance backlogs, spare-parts shortages and personnel turbulence which had a detrimental effect on Air Force readiness during previous years.

The Air Force flying hour program, the central factor in training, had been ravaged by low fuel and inflation estimates further depressing readiness trends.

The announced intent of last year's budget revision was to provide more realistic funding in these basic areas and give priority to necessary improvements within the current force structure.

The purpose of today's hearing is to determine those changes in readiness induced by the 1981-82 budgets and the extent of readiness-related problems remaining to be solved.

I understand that our witnesses this morning do not have reading statements. They have submitted classified statements.

Senator Goldwater, would you like to proceed to questioning?

STATEMENTS OF GEN. B. L. DAVIS, USAF, COMMANDER IN CHIEF, STRATEGIC AIR COMMAND; GEN. JAMES R. ALLEN, USAF, COMMANDER IN CHIEF, MILITARY AIRLIFT COMMAND; AND GEN. WILBUR L. CREECH, USAF, COMMANDER, TACTICAL AIR COMMAND

Senator **Goldwater**. At this time I have only one question that will be directed at General Creech.

A-10 AIRCRAFT

Last year we rather reluctantly bought more A-10's and we were told that would be the end of the line. Now I notice in the budget there is a request for more A-10's. It is my opinion—although I was one of the biggest advocates of that airplane and I still think it is a very fine airplane—that we have enough. Would you agree with the idea that we may have enough now?

General **Creech**. Senator, I am going to have to give you a complex answer because it is a complex subject.

As a generalization, in the 1982 and 1983 budgets we are buying far too few fighters in general.

Senator **Goldwater**. Far too few fighters?

General **Creech**. Overall, in that context the Air Force is supportive of the idea of leaving 20 A-10's in the budget, however, it is equally true that the Air Force has a preference for closing down the A-10 line and buying another type of fighter. That is also true.

We had come essentially to the end of our programed A-10 buy. On the other hand, to support the force structure that the Congress has authorized, not a build, but the force structure they have authorized, we are buying a hundred too few fighters a year.

F-16 AIRCRAFT

Senator **Goldwater**. I agree with the idea that we are not buying enough fighters. The A-10 flyaway cost is 28 percent higher than the F-16. I remember when that bird was first on the board it was going to be a $6.5 million airplane. Now it is up to almost $18 million. On that basis alone I would much rather spend that money on F-16's. I think that is where we have to put most of our money.

Now, I have talked to some of the pilots in some of the A-10 outfits. While they have no quarrel with the airplane for its purpose, they would much prefer to do ground support with an airplane like the F-16.

Although I have never exactly bought the idea of a high-speed aircraft for close ground support, it is obvious that it is working because the Israeli successes were in high-speed ground attack. You can't call the A-10 a high-speed airplane.

Frankly, I don't think the Tactical Warfare Subcommittee, of which I am chairman, is going to look kindly on this. I don't think it will break a lot of hearts, either, in the Air Force if we don't authorize the purchase of more A-10's. I think of our great need, for example, not only in tactical air but also in strategic air and military aircraft.

I don't like to see us waste the money any place for any planes. I don't want to put you on the spot on this because I understand the DOD is the one that wants these airplanes. I even have a pretty good idea who punched them into it, but he is going to find out that he can forget them, too.

General CREECH. I understand. As you know, the cost is high because of the very low quantities; that is a very uneconomical way to buy airplanes.

Your generalization about high speed, that allows us to go back in the second echelon, which the A-10 cannot do, I subscribe to totally. On balance, you would always opt for the higher speed, more capable airplane.

In the case of the illustration you offered, the F-16, on a 1 for 1 basis, would be the choice. I would encourage you though, sir, if you were to take A-10's out, to put some other fighter back in, because we are overall very far well short of what we need.

Senator GOLDWATER. How do you feel about the modified F-15? It is going to be used for ground support?

DUAL ROLE FIGHTERS

General CREECH. Yes, sir. We have stated a requirement for 10 combat squadrons, about 400 airplanes, dual-role fighters, because the F-4's average age is 15 years and is phasing out. The oldest ones are 18 and 19 years. You well know a fighter does not last much beyond 21 or 22 years. The F-111 needs help in the battlefield interdiction role, and the F-15 needs help in the look-down/shoot-down role. We have in mind a dual-role fighter.

We are proposing a comparative evaluation with the F-15 with two seats and the F-16XL with two seats. We call it the "E" configuration. It has nothing to do with our air-to-air F-15's; they will stay air to air. This is a separate requirement that fills a void in our force structure.

Senator GOLDWATER. How much does the modification for ground-support purposes on the F-15 bother the air superiority role? Do the modifications allow it to be a good combat aircraft as well as ground support?

General CREECH. Yes, sir. In fact, that is absolutely fundamental to the concept. There is nothing done to the air-to-air capability of the airplane. As a matter of fact, it should be better because you have a second crew member to help with search, radar manipulation and the rest. It will have a turning capability and all the maneuverability and thrust advantages that it currently enjoys in the air-to-air arena, so, we won't do a thing to disturb that.

Senator GOLDWATER. In your opinion, will that version of the F-15 in any way take the place of the interdiction role of the F-111?

General CREECH. No, sir; it will supplement it, in the sense that we don't have enough F-111's to really do the role. We are not talking of the F-111 replacement, because it has 87 percent of its useful life remaining, but we are talking as it phases out about an airplane that fits in the mode that the F-111 has served. It is to help the F–111 in battlefield interdiction and to help the F–15 in air to air. It is more than an F–4 replacement that we are talking about.

Senator **Goldwater**. I can't make any promises but I don't think we are going to look kindly on the A–10 buy.

General **Creech**. I understand.

Senator **Goldwater**. Don't break down and cry if you don't get them. You can smile in public.

C–5 MODIFICATION

Now, General Allen, how is the C–5 coming along, both the modification and the new?

General **Allen**. The modification, Senator, we put the first production airplane in to the contractor on the 28th of last month. We have looked at it very closely. The test articles have shown two lifetimes without any problems.

We are still on final testing. We had a few problems on the sealing of the fuel tanks on the prototype. We feel very confident that the problem has now been corrected. It was a quality control problem as opposed to an engineering problem, and the necessary quality controls have now been established.

C–5 WING MODIFICATION

We are very optimistic about the progress of that wing modification. As you know, it provides an additional 30,000 flying hours for the C–5 and, of course, the C–5 has a very unique national capability. It is the only airframe we have that will carry outsized cargo.

The decision on the new C–5 I support totally. It is based primarily on availability time. It turns out that by going back into production on the C–5, we can get the first airplane on the ramp in 1985. We will finish production of the 50 airplanes in 1989. That compares with the alternative which we were favoring under other criteria, if you will, of the C–17, which at the earliest would have been a 1988 IOC, and more likely a 1989 IOC. So, we are talking about at least a 2- and possibly a 3-year difference in availability.

Given the present shortfalls in our overall airlift capability today, that 3 years is very significant and we are supporting that C–5 procurement very strongly.

Senator **Goldwater**. Do you feel that you need the C–17 with the added supply of C–5's?

General **Allen**. Yes, sir. It turns out that this buy of 50 C–5B's and 44 additional KC–10A's does not come anywhere near satisfying the identified shortfall in airlift capability. It does, however, satisfy roughly 50 percent of the 20 million ton-miles of additional airlift capability recommended per day in the congressionally mandated mobility study. That 20 million ton-miles per day was predicated on a CRAF enhancement program which, in turn, would have provided 5 million ton-miles per day.

Actually, as it turns out, with no CRAF enhancement, the figure becomes 25 million ton-miles per day. The combination of the C–5B's and the KC–10A's will provide in the neighborhood of 13 million ton-miles per day, so it takes care of about half of the identified shortfall.

We feel there will be a strong requirement in the latter part of this decade to go ahead with further airlift enhancement and for that reason we would hope that the Congress would approve a very minimal level of continued R. & D. on the C–17 during 1984 to further provide an option for the latter part of the decade to augment the airlift capability of the Nation, then an option would be available for the C–17.

We have to consider, as we look toward the period of the 1990's, an eventual replacement of the C–141's. Also, we need to augment in some fashion our intratheater airlift capability. The C–130's, some of which are getting very, very old, are fine airplanes but there is a shortfall today and we are proposing to undertake some modifications to keep those airplanes going, but you can only do that so long.

So, the C–17 also would provide an option to alleviate the pressures on the intratheater airlift force and as a potential replacement for older C–130's.

AIRLIFT SHORTFALL

Senator GOLDWATER. You are still facing about a 20-percent airlift shortfall in your commands; is that correct?

General ALLEN. I am sorry. I didn't understand.

Senator GOLDWATER. MAC has always been short about 20 percent, in my memory, of being able to carry what we have to have carried on M Day or in a near-M-Day situation.

General ALLEN. Yes, sir. We have a major shortfall today. I would not want to get into details in open session, but I would not disagree with the point that you have just made. Actually, it is somewhat more than the 20 percent you just stated.

Senator GOLDWATER. Should we not be worrying about the period around 1990 when the C–141's will begin to phase out and what C–130's your command has will probably be out? I think we ought to be looking hard at that situation now.

Any new aircraft like the C–17, if we start today, we don't get until the latter part of this decade?

General ALLEN. Senator Goldwater, I could not agree with you more. I don't think that we need to worry about C–141's starting to phase out quite as early as 1990, but certainly a few years after that they are going to start dropping out.

Of course, it depends on utilization rates between now and then and a lot of things that are difficult to speculate on. The C–130's, the B and E models, we are going to have to do some modification work on them, because there are cracks in the outer wings and we need to fix that. Once we fix them, they will be good past the year 2000. The "A" models, however, are going to require some wing rehabilitation work just to keep them going through the 1990's. We are evaluating that right now.

Certainly, we do need an alternative. For that reason we encourage your support of this minimum level of funding for the C–17 for the next couple of years, this year and next year actually, and then we will be back in connection with consideration of the 1984 budget with possibly a major decision in that regard.

Senator **Goldwater**. I wonder if it would be possible for you to submit to the committee, under any classification you want to put on it, what you would need to achieve 100-percent or close to 100-percent capability for an M-Day situation?

General **Allen**. Yes, sir, I would be happy to.

Senator **Goldwater**. I would like to see that, because I don't think we have ever really solved the airlift problem. We keep adding and we accept a shortage of airlift on hand all the time. While CRAF has its potential, I never believed it was going to be very valuable except in the matter of lifting personnel.

I wish you would supply that.

General **Allen**. I will be happy to.

[The information follows:]

ACHIEVEMENT OF 100 PERCENT CAPABILITY FOR M-DAY

A wide spectrum of answers is possible for this question, each of which is scenario dependent. For a worst case scenario in the 1990 timeframe where the Soviets invade Iran, followed 10 days later by a simultaneous invasion of Western Europe and an invasion of South Korea by North Korea, our currently programmed airlift force represents [deleted] of the long-range requirement. In less demanding situations, such as a single Southwest Asia scenario described in the Congressionally Mandated Mobility Study, the current force (at programmed capability) is capable of approximately [deleted] of the long-range requirement. So, even under the optimistic conditions, we need to [deleted] our current long-range airlift assets. Also, to maintain a balanced airlift force, we must provide an intratheater outsize capability as well as increase our overall intratheater capacity by at least [deleted].

Senator **Goldwater**. Thank you I don't have any more questions right now.

Senator **Humphrey**. First and foremost, I want to use this opportunity today to compile a record that will hopefully discourage my colleagues in Congress from attacking the O. & M. budget as they want to do from year to year.

I would like to begin by asking each of you to characterize the adverse effects that underfunding has had for your command in past years.

Will you begin, General Allen?

General **Allen**. Yes, sir.

Senator **Humphrey**. Also, what are your thoughts with regard to the priority of O. & M. items in the scheme of things? How would you advise Congress to regard O. & M. matters in this year's deliberations?

MINIMUM LEVEL OF TRAINING

General **Allen**. Clearly, there is a minimum level of training below which one would not wish to go. I would consider that in the Military Airlift Command we are essentially at that minimum level of training right now. I am talking about flying hours at the present time. That is brought about primarily by funding. It is also brought about, of course, by the problems with the current wing on the C–5. We are trying to preserve the capability of the C–5 as we work through this wing modification program, and then we can start flying some more.

Right now, for example, our primary aircrews in a C–5 are exposed to that airplane in a flying environment about once a month. That is about as low as anyone would possibly want to go. Take for instance, our C–5 pilots that are qualified for aerial refueling. In order to maintain their qualifications it currently requires one hookup every 45 days. That is really not nearly enough to maintain proficiency.

We would like to have more than that. We don't have the flying hours, neither do we have at the present time the wing structure that will support that. We have asked for additional flying hours in order to better train our people as sufficient airplanes come out of wing modification.

Similar stories can be told with regard to the C–141 airdrop. We have a requirement for airdrop, air delivery, in numbers that I can provide for the record; however, we are having great difficulty in maintaining an airdrop and air refueling capability for the requisite number of aircrews because of the lack of flying hours. We are just barely making it.

[Additional information follows:]

C–141 AIRDROP/AIR REFUELING FUNDING SHORTFALLS

In fiscal year 1980, JCS tasked MAC to develop a Brigade D airdrop capability. The initial force was sized as an all active force of 137 crews. We have since resized the force to 102 active/38 reserve associate (140 total) crews to better utilize manning in both systems and to give the reserve associates a greater role in strategic airdrop. The approved flying hours and corresponding funding to support these goals is [deleted].

Problems also exist in our air refueling program. Originally, the C–141 air refueling goal was to qualify every crew. Lack of flying hours and tanker availability initially dictated a maximum of two crews per aircraft. Now, with the proposed KC–10 purchase, we have resized our force at three crews per aircraft. Considering projected tanker availability, this goal is realistic and will allow for a continuous flow of airlift even with the severe overflight or landing right restrictions we anticipate. Flying hours for these forces have been insufficient in spite of slipping these goals.

[Deleted].

These shortfalls would be much greater had we not adjusted our goals. As it stands now, we need these flying hours to achieve one crew per aircraft by end of fiscal year 1983.

IF—Industrial funded. TF—Formal School funded.

General **Allen**. Any cuts in our flying hour program would be a major problem.

MAINTENANCE OF FACILITIES

Another part of the O. & M. equation, of course, is the maintenance of our facilities, the backlog of repair. This committee and others have expressed a desire that that backlog not increase. In the case of the Military Airlift Command it requires $66 million a year just to stay even at the $80 million BMAR level. Last year, fiscal year 1982, we funded about $40 million, so we slipped by $26 million. This year, fiscal year 1983, it looks as if we will fund about $37 million, so it is going to slip again.

Those are the sorts of problems that any cuts in O. & M. would exacerbate in the Military Airlift Command.

Senator **Humphrey**. General Davis.

General **Davis**. Thank you very much, Mr. Chairman.

O. & M. is obviously vital to the Strategic Air Command. The picture has historically not been that good. Even in 1982, with 100 percent funding, by the time you spun out 1982 inflation, we ended up at about 91 percent of what we needed and certain things suffered.

As General Allen pointed out, it not only buys aviation fuel, it also funds TDY, temporary duty, and per diem. There have been caps put on that.

BACKLOG OF MAINTENANCE AND REPAIR

O. & M. has very little flexibility, since about 80 to 85 percent of the expenses are fixed costs; that is, civilian pay, utilities, flying hour supplies, annual service contracts and the BMAR—backlog of maintenance and repair.

The backlog in Strategic Air Command is a result of several years of neglect. My BMAR backlog is $187 million. We had not been at the sustainment level for several years until we got to 1982, and I need $65 to $70 million just to contain the backlog now. We will have a little bit more than that in 1983, but it will be 1988 at current rates and current funding levels before I start reducing that BMAR backlog, as it is subject to inflation.

There is little flexibility, about 15 percent flexibility, in O. & M.

Our flying hour program has another problem centering on spare parts. We fund the flying hours, but we don't have sufficient parts to sustain that increase. I am grateful to you for 100 percent funding of 1982 peacetime operating stocks, but with the appropriate 2-year leadtime in spare parts it will be 1984 before we see significant improvement in the flying hour situation.

Right now we are at what I consider the minimum flying hour level when you consider only proficiency requirements to execute our primary deterrent mission, which, I might add, I believe Strategic Air Command is ready to do. But the story has not been good. It is getting better but we certainly need more flexibility with it than we have, and we need to keep up with inflation.

Senator HUMPHREY. General Creech.

General CREECH. It is a similar situation in TAC, Mr. Chairman. I applaud your view that we should not go back to the disastrous policies of the late 1970's when we cut O. & M. and it had a negative effect across the board.

Senator HUMPHREY. Would you say that was poor ranking in priorities?

AIR CREW TRAINING

General CREECH. I would indeed, because it imbalanced your investments in such a way that you introduced diseconomies on a grand scale. If you make major investments in the equipment items and you don't train the air crews adequately, you have lost sight of the reality of the need to balance your overall investment.

Senator HUMPHREY. In the readiness context, is there a higher levered dollar than the O. & M. dollar?

General CREECH. I believe not, particularly if you expand that to include spare parts and the like, because there is a propensity, as you well know, to be cheap at the margins, and those margins have such a fundamental effect. I gave one example in my statement.

An F-15 squadron requires an investment of $575 million just for the equipment. That does not mention all the costs to train the maintenance and air crew personnel and personnel costs and the like. We can fix the spares shortfall for $8 million per squadron, which is about one percent of the total investment cost, but there is a propensity to cut those accounts, which is truly shortsighted.

You can cite that same example in aircrew training and in other areas. I might also add in addition to what General Allen and General Davis have said that I think it must be borne in mind that the fiscal year 1982 O. & M., while up, as General Davis pointed out, was fiscally constrained. He said it was 9 percent below what we needed in SAC.

We had a similar situation, 8.5 percent below what we estimated we needed. Moreover, our fiscal year 1983 request is 14 percent below what we think we need to really operate the Command. It is better than it was before, but it is definitely fiscally constrained; it is not everything that we need.

The backlog in maintenance and repair and the other items—aircrew flying hours and all the rest—I won't repeat all those, except to say that I would hope that the Congress can support our request.

Senator **Humphrey**. I thought your F-15 example was excellent and well stated.

You say your 1983 request is 14 percent under what you feel you need. Please give us a comparative figure for 1982.

General **Creech**. In 1982 it was 8.5 percent and that is a combination of the effect, as previously mentioned, of the growing backlog of repair after years and years of neglect and the compounding effect of the underfunding in the late 1970's, if you will, which rolls over and magnifies, plus some new requirements. As the air-launched cruise missile and some other things come on line, actually our 1983 budget in TAC at least, is below our 1982 budget as it is now submitted to the Congress. So it is very definitely constrained.

O. & M. DEFICIENCIES

Senator **Humphrey**. In real terms it is growing worse. Doesn't that indicate some deficiency in the ranking of priorities? Who makes that decision?

General **Creech**. No, sir, I don't believe so, because again one strives for a balance. I earlier expressed my concern that, for example, in fiscal year 1981 we bought 288 fighters. In fiscal year 1982 we bought 176. It came over from DOD for 222 fighters, but the Congress in its wisdom cut that to 176. When you consider all our requirements for strategic air defense and tactical fighters, that is about half as many as we need, so it really reflects, in my judgment, Mr. Chairman, the overall constraints, even with an expanded defense budget.

I strongly support the levels that have been submitted for 1983. My point is that they are fiscally constrained and to cut them further would deeply wound readiness.

Senator **Humphrey**. To cut that further would deeply wound readiness—I think that is a key statement.

In real terms, the fiscal year 1983 request for O. & M. is in worse shape than it was in fiscal year 1982.

General **Davis**. Mr. Chairman, I think General Creech made a very, very telling point there. For those who look at the size of the

1983 budget and say it is out of proportion and must be cut, our point, is that the budget is constrained when it gets here. Not everything we need is in that budget.

A tradeoff between O. & M. and spare parts and force structure must be made for our priorities in terms of modernization. What the operational commanders in the field have seen is, of course, a significant improvement from the late 1970's when O. & M. and spares had little or no constituency, committees such as this have picked up the cudgel and are backing those budgets. But we certainly don't get everything we want.

The point is that it is a constrained budget. Before one starts taking it apart, remember it takes us about a year to put it together and there are some gives and takes in that budget.

Senator **Humphrey**. I want to welcome my friend and colleague and the ranking member on this subcommittee, Senator Levin.

Do you have a statement, Senator Levin.

Permit me to continue with this one line of questioning and then I will turn to you, if you are ready.

The witnesses this morning did not present reading statements. They have, however, presented statements for the record.

O. & M. SHORTFALL

General Davis, let me ask the parallel question that I asked of General Creech: The 1983 budget in the areas of O. & M., what percentage of shortfall does that represent from what you think your needs are?

General **Davis**. Right at 10 to 12 percent.

Senator **Humphrey**. What was it last year in that same context?

General **Davis**. Last year it was about 9 percent.

Senator **Humphrey**. In real terms, assuming you get what you have requested in the area of O. & M. in 1983, does that represent an improvement or further deterioration?

General **Davis**. About where we were, maybe a slight degradation.

Senator **Humphrey**. General Allen.

General **Allen**. I would say about 10 percent and I think we are getting a little bit better.

Senator **Humphrey**. You are getting better?

General **Allen**. Yes.

General **Davis**. I might add, if we get an increase in BMAR, which I believe we will before the 1983 budget is completed, we will show a slight increase, but not as it stands right now.

Senator **Humphrey**. Very well.

Senator Levin?

Senator **Levin**. Just following that line of questioning for a moment, what will the shortfall be in the outyears under the 5-year plan?

General **Davis**. Is that question for me, Senator Levin?

Senator **Levin**. Yes.

General **Davis**. We get back to a sustaining level, that is, where annual funding will allow us to have a virtual zero backlog by 1988.

Senator **Levin**. General Allen?

General Allen. The same.

Senator Levin. By the final year in the 5-year plan?

General Davis. Yes, sir, with the program as it is laid out. I have a $187 million backlog presently.

Senator Levin. We have done some analysis of the Defense Department budget, trying to compare the percentage increase this year in the budget in the overall procurement accounts, the investment accounts, the modernization accounts, and sustainability accounts. Our figures come up something like this:

In the investment accounts, modernization, there is a 28-percent increase in the budget, but there is only a 6-percent increase in the O. & M. account. That is overall in the Department of Defense. I wonder whether you have done any analysis similar to that in the Air Force and whether you can give us those figures?

General Davis. My little, simplistic analysis, which I just went through with Senator Humphrey, showed no increase in 1982 over 1983, but I will be happy to provide you a more precise estimate for the record, sir.

Senator Levin. That will be helpful.

[The information follows:]

Modernization—Investment Accounts

General Davis. The following table shows the relative percent increases in the Air Force budget from fiscal year 1982 to fiscal year 1983: (major investment accounts vs. O. & M. only)

[Current dollars (B)]

	Fiscal years—		Percent
	1982	1983	
Aircraft Procurement	14,021.9	17,756.7	26.6
Missile Procurement	4,573.9	6,827.9	49.3
Other Procurement	5,406.9	5,845.2	8.1
Total	24,002.7	30,429.8	26.8
O. & M. (AF)	16,123.9	17,944.7	11.3
O. & M. (RES)	669.8	766.3	14.4
O. & M. (ANG)	1,647.8	1,761.8	6.9
Total	18,441.5	20,472.8	11.0

READINESS DEFENSE DOLLAR

Senator Levin. Another analysis which we have done indicates that overall for the Department of Defense a rather unique thing is happening this year, as last year, that has to do with the percentage of the defense dollar which goes to readiness compared to the percentage of the defense dollar which goes into modernization or procurement accounts:

In the 1970's, approximately 29 to 31 percent of the defense dollar went into readiness, and from 22 to 25 percent of the defense dollar went into investment in modernization and major procurement.

Now, there are many people who think we have cheated readiness. I happen to be one of those people. There are many people who think we cheated modernization, and there are many people who think we have cheated both. That is not really the question I am getting to, because what I am asking is for the proportion between investment and readiness. That proportion was about 30 percent for O. & M. and readiness and 20 to 25 percent for investment in modernization throughout the 1970's. It never fluctuated from that pattern, according to our figures.

Suddenly, in 1982 it shifts, the lines cross, and we now see a major increase in major procurement and a slight decline in the percentage of the defense dollar going into readiness. This gets worse in 1983, the O. & M. accounts go down to 27 percent and the procurement accounts go up to something like 34 percent.

So, what you do have is two lines throughout the 1970's which are steady. Again, we are talking about proportion to each other, putting aside whether there was enough invested in anything. We have a relationship between the two which remained steady in the 1970's and suddenly shifts dramatically in 1982 and 1983.

I am wondering whether or not you have seen that shift taking place, and if so, whether it bothers you?

General DAVIS. First, Senator Levin, one has to look at the 1970's, particularly the mid to late 1970's, and look at finite dollars. There was some procurement for General Purpose Force modernization. There was some investment—virtually zero—in strategic forces. The overall magnitude of the dollars and, as you are well aware, the high investment items required to modernize strategic forces, undoubtedly account for some of this. The continued modernization, albeit of General Purpose Forces, is increasing.

Now, in the 1970's we were by no means near where we should have been because there were some very depressed budgets. On a percentage basis, there may have been those around Washington who where happy, but I can tell you those of us who were trying to run the Air Force at least were very unhappy. Those were very pinched years in terms of O. & M. budgets and in terms of people moneys. Readiness certainly suffered while we were going through that General Purpose Force modernization program.

Now, we have procrastinated for 12 years in modernizing our strategic forces, so investments are going to be necessarily high. That makes sense to me.

Senator LEVIN. Would you do this for the record? Would you go back, if you can do so without a lot of trouble, 5 to 10 years, and give us the portion of the Air Force dollars going into readiness accounts, any way you want to define them, and the proportion of dollars going into the investment accounts throughout the 1970's, as much as you can do with some ease, and give us the same for the years in the 1980's, the 5-year plan?

All I can say is that there is a major shift in proportion. We may have cheated investment accounts. But, we have cheated readiness even more. Neither one of those comments solves the problem about the balance between how much we put into spare parts and how much we put into new planes. That balance between what we are going to put in spare parts and how much into war stocks and into new equipment has shifted dramatically.

General **Davis**. I guess that turns on your definition of "dramatic."

Senator **Levin**. It significantly shifted. Maybe it is a shift for the better. I am not even quarreling with the shift. I want to make sure, if it is happening, it is true that we are making a wise decision, if in fact it is a conscious decision.

Before we can really reach that conclusion service by service, I think we would need to see the two lines as you define them; and again I am not going to quarrel with every definition you come up with, what are readiness accounts and what are modernization and investment accounts; if you could trace those for us in the 1970's and early 1980's, it would be very helpful to us.

General **Davis**. Certainly.

[The information follows:]

Dollars for Readiness Investment Accounts

As you know, it is difficult to precisely define or specifically categorize the terms readiness and investment. This is because virtually every Air Force dollar, whether in the operating or the investment appropriations, is necessary to improve Air Force readiness over the long-term. However, for this purpose, we believe readiness funding should be defined as those funds which enhance the capability of existing forces to meet both peacetime training and initial wartime requirements. Using this definition, readiness and investment funding for the Active Air Force can be separated as follows:

Readiness.—Operation and maintenance; military personnel; stock fund (TOA for war reserve (expendables and prepositioned fuel); aircraft procurement (replenishment spares and support equipment; and missile procurement (replenishment spares).

Investment.—Aircraft procurement (except replenishment spares and support equipment); missile procurement (except replenishment spares); and other procurement (except munitions and vehicles).

Based on the above categories of readiness and investment accounts, the following funding percentages (fiscal year 1970–84) are provided:

Fiscal Year	Percent	
	Readiness	Investment
1970	60.9	39.1
1971	63.6	36.4
1972	65.2	34.8
1973	62.5	37.5
1974	62.5	37.5
1975	64.0	36.0
1976	63.0	37.0
1977	60.0	40.0
1978	61.3	38.7
1979	60.6	39.4
1980	60.0	40.0
1981	59.2	40.8
1982	55.7	44.3
1983	50.0	50.0
1984	47.7	52.3

The decline in the percentage of funds going into the readiness accounts in 1983 and 1984 is a function of two primary contributing factors. First, the increased emphasis and funding in 1981 and 1982 in the readiness areas, such as replenishment spares, vehicles and munitions, have bought us to the point where we are no longer trying to correct past deficiencies but can now buy for the annual requirements needed to sustain the enhanced levels gained. Second, the emphasize on redressing the strategic imbalance requires large, up-front investment in programs, such as the B-1B and the M-X. The impact of these investments on the operating or readiness portions of these programs will not occur until several years in the future.

We feel we have a fair mix in the fiscal year 1983 Air Force Budget. We monitor this area very closely because we share your concern that an optimum mix of readiness and investment funding is maintained.

COLLOCATED OPERATING BASES

Senator HUMPHREY. Senator Goldwater.

Senator GOLDWATER. General Creech, we are building a force in size and readiness and so forth, but do you have facilities to fight from if you deploy to Europe? Are the collocated operating bases adequate in terms of fuel supplies, revetments and so forth? Could you discuss that?

General CREECH. I will be happy to, Senator.

We have serious inadequacies in that regard. Our basing situation on balance is better due to the initiative that was taken in approximately 1972, along with our allies, called the collocated operating base program. The notion, as you know, Senator, is to put our units on allied bases and, of course, take advantage of their infrastructure spending to support our forces when they go over.

That, of course, is a great economic advantage to us in bedding down our forces in locations overseas. We have for a long period of time been petitioning the Congress for very modest sums of money to provide for what we call minimum essential facilities at these collocated operating bases. This would be a modest amount of storage, fuel, ammunition, and some communications. It comes out to about $5 million in fiscal year 1980 dollars per location.

We have not thus far had much luck in getting that out of the Congress, and I would strongly encourage consideration of that, and I know CINCFUSAFE, Charlie Gabriel, feels very strongly that there is more readiness you can buy with a very modest investment in buying into that Allied infrastructure than almost any other dollar you can spend.

Senator GOLDWATER. Let me go a little bit further with that. Our flying and ground forces are living under clearly terrible conditions; that is, the individual. Some of them are living in barracks built for World War I. Now, are you experiencing any morale problems from poor housing or poor basing?

General CREECH. Yes, sir, overseas. We have problems in Korea; we have problems in Germany; we have problems in Turkey. It is brought on by the chronic underfunding of the O. & M. accounts, particularly from 1975 on. But it was in the early 1970's, as well, that the Defense budget shrank. We have had a serious shortfall in housing both for married people and our bachelor unaccompanied personnel.

Of course, that carries over into the States as well; it gets into this insufficient-funds situation to take care of just plain base upkeep, including quarters' upkeep. So, we have similar problems to the Army's.

Senator GOLDWATER. I wonder if you could have your staff prepare a paper—it does not have to be in a great hurry—stating the total amount that you feel you need to bring the base structure, both within the United States and other places, up to the quality that you think we would need to maintain the morale that we have to have?

General **Creech**. We would be happy to provide that for the entire Air Force, for the record, Senator.

[The information follows:]

Quality of Bases To Maintain Morale

The condition of real property plays an essential role in force readiness and sustainability since the Air Force must train for and be prepared to carry out its wartime mission from fixed installations. The condition of real property facilities also plays a role in the quality of life, productivity, morale, and retention of Air Force people; i.e., working and living conditions, and community/recreational facilities.

In mid to late 1970s the impacts of age and deterioration, high inflation and inadequate funding for real property maintenance caused an overall decline in the condition of Air Force facilities. That decline is portrayed by the significant growth in the backlog of maintenance and repair (BMAR) on real property facilities. BMAR is the primary indicator used to judge overall facility conditions. BMAR has increased each year since fiscal year 1975. The last actual reported BMAR at the end of fiscal year 1981 was $529.5 million. The fiscal year 1983 real property maintenance budget request (excluding supplemental funding) will reduce the BMAR to $270 million. However, an additional $170 million is required above the fiscal year 1983 RPM budget request to reduce the backlog to a manageable level of about 6 months of effort.

Another area which has a significant impact on morale is that of dorm furnishings. The backlog in funding furnishings for unaccompanied personnel housing for fiscal year 1983 is approximately $23 million. Funding is required to furnish various newly constructed or renovated dormitories and is needed to replace badly worn or nonfunctional items in existing facilities. The limited space available in dormitory rooms coupled with the style of living and quantity of personal property and equipment today's airmen acquire has resulted in less than adequate living conditions where appropriate furniture is not available to provide flexibility in room arrangement and use without taking up excessive floor space.

Senator **Goldwater**. One more question. When you are collocated do you find any difficulty in obtaining fuel or other base supplies that we would normally handle if we were not collocated?

General **Creech**. There is a competition for the fueling—the pipeline. That is why we want the storage. On the one hand, our allies have been exceedingly forthcoming in setting up the program and sharing facilities and ramp space and communications and the rest; but there is some modest amount we have to spend, marginal at best though it may be, to help make sure that the squadron we put in there has the fuel when it needs it and the bombs when it needs them—if that is the thrust of your question.

AIRCRAFT ATTRITION

Senator **Goldwater**. Now, I would like each one of you to answer this, and I am using the figures supplied by General Creech: On last year's buy of aircraft for your command, did that buy cover the actual attrition that you go through each year?

General **Creech**. No, sir. We are buying at a rate which means we are going to have to cut force structure if we continue to buy at this rate. Speaking for the tactical force, we need to buy about 280 fighters a year to support the force we have.

As you know, we have 35 wings. There has been a proposal for a long time to build that to 40. Indeed, in the Secretary of Defense's posture statement he supported a tactical force of 44 wings in the latter part of the 1980's. That not only does not seem to be in the cards unless we start buying more airplanes, but, indeed, we are going to have to cut back on the force structure we have.

We are buying in the aggregate this year in the U.S. Air Force fewer airplanes than we will lose by age and attrition.

Senator Goldwater. That has happened before?

General Creech. Yes, it has. We go through peaks and valleys in procurement and that exacerbates the problem because you get block aging. For example, we bought some 1,400 F-4's that are presently in the tactical fleet in the 5-year period between fiscal years 1964 and 1969. They average 15 years of age and they are all going to block age at the same time and we will have a major procurement bow-wave problem beginning in approximately 1985. So any deferred procurement now just exacerbates that problem when we get to that timeframe.

Senator Goldwater. General Allen.

General Allen. In the context of the Military Airlift Command, as you know, the last C-5 was purchased in May, 1973. We did not lose any of those last year, so there was no attrition. The last C-141 was purchased in February, 1967. We did not lose any last year, so there was no attrition there. The last C-130 purchased for the active force was in 1954. We did lose two 130's last year.

I think it probably would be fair to say that was more than balanced by the C-130H's that were purchased for the Guard, because we do have a very good ongoing total force program in the Air Force, and I would calculate that as a net increase of six under those circumstances.

Now, I think that perhaps tends to explain also the crossover and curve as far as the airlift is concerned. There has been no investment in the Military Airlift Command for a long number of years. There are some proposed for this year. Certainly the curves in the case of the Military Airlift Command would cross this year.

General Creech. If I may piggyback on that, of course, General Allen will be the first to say it is not just an attrition problem; it is a force-aging problem.

General Allen. Of course.

General Creech. If he is not buying any airplanes, there is force aging, you are getting a tremendous bow-wave there.

Senator Goldwater. General Davis.

General Davis. Of course, you know I have no procurement, and no force aging and attrition fillers except what was initially procured. The last B-52 came on line in 1962. The last KC-135 came on about 1959. The last FB-111 came on in about 1970. None have been procured since. There were attrition aircraft included in the initial buy. Unfortunately, they were dropped out of the FB-111 buy. There has been no investment to speak of in Strategic Air Command for 12 years, so no wonder the lines go up.

Senator Goldwater. Actually, the removal of the F-111 from purchasing has done a lot of damage to our ability to accomplish interdiction tasks; is that right?

General Davis. For SAC, of course, we use a slightly differen version, the FB-111 strategic version. If you will remember the history, at one time we were going to procure about 240 of thos sytems, but we cut that buy to less than 100 because we were goin to get a new bomber, an early version of the B-1.

As we have been wanting to do for 12 plus years, we have waited on better technology, so we cut that buy and we did not procure any more FB-111's.

Senator GOLDWATER. That is all I have.

DEPOT MAINTENANCE BACKLOG

Senator HUMPHREY. Returning to O. & M. matters, gentlemen, let me ask each of you to have your staffs prepare charts showing in 1982 or 1983 constant dollars, the backlog in depot maintenance and base maintenance, and the dollar value of spare part shortages. Can you do that?

General DAVIS. Yes, sir, we will be happy to.

[The information follows:]

BACKLOG IN DEPOT MAINTENANCE

Depot maintenance backlog for fiscal year 1981 through fiscal year 1983 is reflected below. Outyear backlog projections are currently undergoing change as the Air Force proceeds with its fiscal year 1984 budget formulation process. Our objective during this process is to maintain a zero backlog posture.

[In millions of 1982 dollars]

	Fiscal years—		
	1981	1982 [1]	1983 [1]
Backlog	12.8	0	0

[1] Estimates.

BACKLOG IN BASE MAINTENANCE

The Air Force Backlog of Maintenance and Repair (BMAR) versus funding, in constant fiscal year 1983 dollars, is shown for the fiscal years 1975 through 1983. The fiscal year 1982 estimate is shown both with and without the fiscal year 1982 supplemental appropriation request. The fiscal year 1983 BMAR estimate is shown reflecting both the impact with and without the fiscal year 1982 supplemental appropriation request.

[In millions of constant fiscal year 1983 dollars]

	Fiscal years—										
	1975	1976/7T	1977	1978	1979	1980	1981	1982 [1]	1982 [2]	1983 [3]	1983 [4]
BMAR	276.6	280.1	352.8	446.9	497.1	605.9	608.9	325.7	405.2	188.0	270.0
Funding	239.2	205.9	198.8	179.1	181.3	237.2	370.2	523.9	444.4	392.2	392.2

[1] Estimates reflect impact with $75 million supplemental request.

[2] Estimates reflect impact without $75 million supplemental request.

[3] BMAR estimate reflects impact with fiscal year 1982 supplemental appropriation.

[4] BMAR estimate reflects impact without fiscal year 1982 supplemental appropriation.

Senator HUMPHREY. I think that will be very useful, and we will put that in the record. I would like to have that report available to me in my office. I don't have time to go back and read these transcripts, and I wonder if anybody does? Possibly we could save money by eliminating all this?

Senator **Levin**. I think I read one of these last year. I read a paragraph from one last year, on a Saturday evening.

Senator **Humphrey**. It might be useful in putting together the pieces at some point.

Senator **Goldwater**. It cost us $20 million last year.

Senator **Humphrey**. Let me ask you some questions that have come to mind in reading each of your statements. I found it interesting, General Davis, to read and also to hear this morning, that you are more constrained in flying hours by spare parts than you are by fuel; is that correct?

General **Davis**. That is correct.

Senator **Humphrey**. That is going to be the case until 1984?

General **Davis**. That is correct. You can buy the fuel but if you don't have the spare parts to sustain the flying hours, and there is about a 2-year leadtime——

Senator **Humphrey**. Let me amend that request I made a moment ago for those charts in constant dollars, 1982 or 1983 constant dollars. I would like that projected according to the budgets you have submitted, those graphs projected into at least 1986, so that we can see where we have been and where we are going in real terms.

[The information follows:]

BACKLOG OF BASE MAINTENANCE/DOLLAR VALUE OF SPARE PARTS SHORTAGES

General **Allen**. The historical backlog of maintenance and repair (BMAR) for the Military Airlift Command, including fiscal year 1982 and fiscal year 1983 budget estimates, is as follows. Funding levels for the outyears (fiscal year 1984 through 1988) are still being worked at the Air Staff, and final figures have not yet been approved by the Office of the Secretary of Defense.

[In millions of constant fiscal year 1983 dollars]

	Fiscal years—								
	1975	1976/7T	1977	1978	1979	1980	1981	1982	1983
MAC BMAR	31.6	24.9	46.1	44.0	32.6	79.9	51.8	40.8	27.2

Concerning spare parts shortages, while funding allocation did not fully satisfy fiscal year 1981 peacetime operating stock (POS) or war readiness spares kit (WRSK)/base level self sufficiency (BLSS) spares requirements, we did receive initial other war reserve materiel (OWRM) funding for the C-5. In fiscal year 1982 we received full POS and WRSK/BLSS funding and partial OWRM funding for the C-5, C-130, and C-141. If current fiscal year 1983 projected funding levels are achieved, our spare parts shortages against Defense Guidance objectives will be as shown below. Figures reflect fiscal year end unfunded carry-over and do not include funding allocated during that fiscal year.

[In millions of constant fiscal year 1983 dollars]

Weapons system	Fiscal years—	
	1983	1984
C-5	0	0
C-130	26.9	0
C-141	33.0	0
H-1	.9	0.9
H-3	1.2	1.2
H-53	7.2	7.2

Due to lead-times, we will be awaiting spares delivery through fiscal year 1985 for the C-5, fiscal year 1986 for the C-130/C-141 and 1987 for our helicopters.

WAR RESERVE MATERIALS SHORTFALL

Senator **Humphrey**. Let me ask this, General Davis: Your chart on page 14 shows that you have been 100-percent funded on peacetime operating stocks only since this year, 1982. That indicates just a pipeline problem, OK? What are the implications of these gross shortfalls in other war reserve material?

General **Davis**. Sustainability for either a contingency—a conventional—conflict or a nuclear conflict, until the industrial base catches up.

Senator **Humphrey**. We all know the industrial base is sadly eroded in this country. After 30 days your command is not likely to be involved in strategic operations?

General **Davis**. That may or may not be the case. In any case we have to go with the supplies we have. In a conventional sense the support of both strategic airlift and tactical forces, spare parts for KC-135's and B-52's would be a problem.

AIRCRAFT REFUELING

Senator **Humphrey**. You have very heavy and important responsibilities particularly in refueling. What is your level of confidence in the European scenario that after 30 days you would be able to continue operations? Can you describe what you envision today if we are at plus 30 days and you are being relied upon to refuel the airlift which is critical to success?

General **Davis**. Yes, sir. I am sure that we would start digging into—depending on the gravity of the situation—some of our stocks that we have to maintain our daily nuclear alert. I am sure we would degrade some of our SIOP alert as we did in the early days in southwest Asia.

Senator **Humphrey**. You state on page 176, speaking of the Russians, they are prepared to effectively employ nuclear weapons in pursuance of national objectives at levels of conflict short of total nuclear exchange. That is a very important statement. What is the basis of that statement?

General **Davis**. Doctrine.

Senator **Humphrey**. Written somewhere in their doctrine?

General **Davis**. Doctrine and our estimation. Of course, the page you are reading from is classified, but the intelligence community would support me in this.

Senator **Humphrey**. Is there any serious challenge to that assumption within defense circles today?

General **Davis**. Not that I am aware of.

Senator HUMPHREY. On page 18 you note that our estimated warfighting capability in the strategic realm has declined while Soviet capabilities continue to increase. You said that today we have less capability of attacking broad-range Soviet military targets than we had in 1977. You make that statement, on the one hand, on the other, we hear of overkill and our ability to destroy the Soviet Union X times over and thousands of warheads lying around waiting to start a war, et cetera.

General DAVIS. Yes, sir. When those comparisons are made you are talking about static measures; there has not been a dynamic interchange. Systems have to survive and arrive to do that damage many times over.

It is very easy to point to the numbers of nuclear warheads and delivery systems. It is quite another thing to put them in a dynamic exchange.

STRATEGIC DEFENSES

Senator HUMPHREY. One of the elements of the President's strategic modernization package is improvement in our strategic defenses. I guess we are going to have to go into closed session at some point. So, we will plan on doing that.

To the extent you can answer the question, what is the significance of the new Soviet bomber which was revealed to our satellites recently?

General DAVIS. Very significant. I don't think it is any secret to anybody, let alone the Soviets, that we know of its existence. It will have a capability probably akin to the B-1. It is larger than the B-1. Further than that, I really don't feel I can go on at this point.

Senator HUMPHREY. Fine. We will go into closed session on some of these things. I am not trying to get you in an uncomfortable position at all.

Has an assessment been made of the role of that aircraft; is it a strategic bomber; is it a naval bomber; what is the assessment?

General DAVIS. If the Soviets continue the pattern—and they probably will—they will use it in strategic and naval roles. They use Backfire, for instance, in both roles; their earlier aircraft, the Bears, were also used in both roles.

Senator HUMPHREY. Senator Levin?

Senator LEVIN. Thank you. I have asked General Davis for certain information for the record on investment and readiness expenses over the decade of the 1970s and early 1980s. I am wondering if you two gentlemen, General Allen and General Creech, can also supply it for the record?

General DAVIS. As I heard the question, you wanted it for the total Air Force?

Senator LEVIN. That would be good. That wasn't very precise, so I thought I would clarify it.

SPARE PARTS SHORTAGE

General Davis, you said that you couldn't increase the flying hours program until fiscal year 1984 because of a shortage of spare parts and the fact it takes a couple of years to obtain them.

Didn't Congress add money to the Air Force request for spares in fiscal years 1981 and 1982 and, if so, why would the flying hours in fiscal years 1984 and 1985 still be 17 percent below the fiscal year 1981 level?

General **Davis**. There are several explanations. Are you talking about total flying hours or Strategic Air Command hours?

Senator **Levin**. Just yours.

General **Davis**. There are simulators, mission-type simulators. There are fewer aircraft and there is an increase that needs to be made in the flying time program. There is an anomaly in it right now, that we are adjusting. It will be adjusted upward by 1984.

Senator **Levin**. I am not sure I understand how that answers the question about the spare parts, which we added.

General **Davis**. I would have to get into the details of where the money went in terms of spare parts, in terms of high priority spare parts and what the money bought exactly. They may have brought us up in 1981. I wasn't on scene for the 1981 budget and I will certainly provide that for the record, but 1981 moneys, just like 1982 moneys, have a habit of not keeping up with inflation. We may have bought less than we originally thought we could.

Senator **Levin**. Maybe you can provide that for the record for us, because that would seem like an anomaly, too.

[The information follows:]

Flying Hours and Spare Parts

General **Davis**. Senator Levin, the funds Congress appropriated for spares in fiscal year 1981 and 1982 fully funded spare parts needed to support programmed B-52 hours in fiscal years 1983 and 1984. The fiscal year 1983 Budget request funds the B-52 flying hour increases of 7,000 and 15,000 hours in 1984 and 1985 respectively. These increases did not fully offset previously programmed flying hour decreases from the fiscal year 1981 level.

General **Allen**. With regard to the Military Airlift Command, I might be able to clarify. In fiscal year 1981 the Congress provided $160 million, $160.2 million, precisely, for other war reserve material aircraft spares for the C-5. In fiscal year 1982, $160.4 million for C-5 and C-141 and C-130. None of those spare parts are yet in our warehouse. It is still leadtime away.

ENGINE SPARE PARTS

Most of the fiscal year 1982 money in the case of my command went toward engine parts where there was the most critical shortage. That is the longest lead item. An engine compressor requires 46 months from date of procurement until delivery.

In the case of MAC, we will not be well as a result of the 1981, 1982, and 1983 procurement for spare parts. That is, we will not be up to our sustainability level and objective until 1985 in the case of the C-5 and 1986 in the case of the C-141.

Senator **Levin**. I see that. My question related though to the fact that by 1984 and 1985 the flying hours were still 17 percent below 1981; that is after a four-year lag, even though we added that money in 1981. That is what General Davis will be addressing.

General **Davis**. Part of it, as I say, goes for simulators. The flying hours were understated in the Air Force program and they will be corrected, certainly.

General **Creech**. May I say just a few words, because the situation is different in each of the commands?

The added spares money in 1981 and 1982 was a tremendous shot in the arm in the tactical forces. Some of the parts have shown up, although we have the same lead time problem. That infusion of additional funding has allowed us to go up in flying hours, which you supported, and we have a proposal for an increase in 1983 which we can fly if you will approve those flying hours, and I strongly encourage you to approve them.

So, it is a little bit different in each one of the commands.

WARTIME SPARES

To further complicate the picture, of course, a great deal of that 1981 and 1982 supplemental funding was for wartime spares which is not necessarily to be confused with peacetime operating stocks. The bulk of that money indeed went for the spares one uses for higher utilization rates in wartime, so, it does not necessarily create a restraint on peacetime flying hours, per se.

Senator **Levin**. Are any of you gentlemen concerned about the so-called new maritime strategy and the potential drain that that commitment will have in terms of readiness throughout the services, the heavy capital investments which are being made in that strategy?

MARITIME PROGRAM

General **Creech**. It troubles me in the way some articulate that; it does not trouble me with the way the senior DOD officials articulate it—Secretary Weinberger, Secretary Carlucci. I think what they are saying is exactly right—we need a stronger maritime.

There are some, though, outside of DOD who articulate maritime strategy and some other buzz phrases, "Island Nation" and others, that carry with them the connotation that one sort of draws back from defending Europe or draws back from involvement in the Rapid Deployment Force and so forth, and that concerns us deeply, because we think that is isolationism in another form. So, we support maritime superiority and a buildup of maritime capability, but we don't support the articulation of a so-called maritime strategy.

There is another thesis that goes with that, and that is the issue of "horizontal escalation." That has utility as far as it goes, but obviously one has limitations in horizontal escalation as well. You can't, for example, just conceive of a land war where you are losing, where you escalate at sea and somehow balance the account. If you lose the land war you have lost the whole war.

Senator **Levin**. To be more precise, are any of you gentlemen concerned about the proposed commitment in this year's and the 5-year budgets to the 600-ship program, the maritime program that that budget in terms of any implications for readiness in the outyears or this year?

General **Creech**. I think it is the turn of my colleagues.

Senator **Levin**. General Allen or General Davis, either one.

General **Allen**. I will start it out and speak not in the context of my present job but in the context of my previous job as Deputy CINCEUR in EUCOM, I saw the impact of a shortfall of ships and there is no question in my mind that we need additional ships in the U.S. Navy fleets.

Senator **Levin**. You are not troubled by the 5-year budget in terms of naval investment?

General **Allen**. No, sir.

General **Davis**. I am not troubled with it, Senator, with the sole exception of—as General Creech expressed it—the "Island Nation" strategy, if it ever gets to that point. I believe the budget was put together very, very carefully. There may be some disagreement about that, but I believe it is a constrained budget and it provides for modernization and certainly it provides for an increase in our sea power. I think that is quite appropriate.

But for those who would withdraw from Europe, withdraw from overseas commitments, then I think that part is wrong; but I support the budget.

Senator **Levin**. One last question and I don't know whether we are in time. I am probably out of it. For the record, would each of you gentlemen provide us with answers to the following questions:

Do you have sufficient funding in the 1983 to 1987 period in the readiness account?

You may have been asked that just as I was coming in. If not, would you provide that for the record and, specifically, General Davis, would you let us know for the record why you are not troubled by the heavy investment in ships in light of the fact that the war reserve stocks for the other war readiness material accounts are so poorly funded? If you will give us that for the record, since my time is up.

General **Davis**. Certainly.

[The information follows:]

Readiness Posture

General **Allen**. Identifying the status of our readiness accounts goes beyond annotation of the dollars included in this year's budget and outyear program. We have, however, included specific programs and dollar costs for your review below. While we have taken great strides in programming for readiness improvements, there are several issues that warrant close attention. I'll focus on these issues in the context of their impact across the broad spectrum of readiness which include our people, our ability to rapidly project forces, and the follow-on modernization efforts necessary to sustain and enhance our readiness posture.

First, I would like to thank the Congress for support given in the fiscal year 1981 Supplemental and fiscal year 1982 Amendment. With these increases, MAC was able to take some crucial steps toward increasing our overall readiness posture, especially in procuring long-lead spares and increased flying hours. Notwithstanding these increases, however, there remain some areas of concern.

(a) Recruiting and retaining quality people are the first essential steps toward building a capable, ready force. The Congress has shown strong support for recent pay and benefits legislation. This support has gone a long way toward improving the standard of living of the military member and improving morale. However, some areas directly related to readiness are still lacking.

One such area that continues to be of concern is the manning level of mid-level maintenance technician authorizations. Currently, we can only fill these authorizations at 85 percent in the Technical Sergeant grade and 73 percent in the Staff Sergeant grade. This lower than desired level of manning in a critical readiness skill area is aggravated by the fact that over 56,000 vacancies for comparably skilled maintenance technicians will exist in the civilian sector over the next 3 to 5 years due to retirements. We can expect military maintenance technicians to be recruited heavily to fill these vacancies.

We need to continue providing strong incentives to retain these quality people and recruit more trainees. Specific programs should include dental CHAMPUS, equitable PCS move reimbursement, and a transferrable GI Bill.

(b) Another concern focuses on our ability to rapidly project forces when and where needed worldwide. In order to perform the airlift mission, we need to improve the capability of our existing resources. Again, the fiscal year 1981 and 1982 funding of replenishment spares allowed long-lead procurement of several critical components, and funding must be sustained to enable our C-130, C-141, and C-5 aircraft to reach desired objective utilization rates as currently programmed in fiscal year 1985/fiscal year 1986. Operating the aircraft at higher utilization rates requires an increase in flying hours above those programmed to assure a trained aircrew force is maintained. Direct mission support areas also benefit from this increased flying activity—maintenance personnel who work on these aircraft at all en route stations can maintain and enhance their proficiency by actual hands-on time. Our aerial ports currently are not geared to accommodate these high rates of activity, and aerial port personnel require training and adequate equipage to sustain these increased activity levels. We have expended the funds to "stretch" the C-141 and make it air refuelable; we need now to invest in more flying hours to capitalize on (1) the refueling flexibility, (2) the opportunity to do airdrop and more joint training, and (3) increased readiness training for our crews.

Of course, an essential element that binds the system together is command and control. We are in the process of publishing the results of a comprehensive MAC C^2 system study that will provide direction to upgrade our archaic system.

Beyond the airlift mission, we need to also assure the adequate deployability of the combat rescue force of the Aerospace Rescue and Recovery Service (ARRS). Of specific concern is acquiring the level of capability of C-130 tanker aircraft to support current helicopter assets and the air refuelable HH-60D aircraft as it comes into the inventory.

The Air Weather Service (AWS) is laboring under the weight of the 1960's equipment technology. Several equipment upgrades are required to provide timely and accurate weather data and to maximize our readiness potential. We have the potential to improve combat sortie efficiency with a program to upgrade and modernize weather stations. We will provide support to precision guided munitions by obtaining weather information from the battlefield or data-denied areas. Scarce combat assets will be better protected from severe weather with acquisition of an advanced weather radar. Finally, weather support to worldwide tactical and strategic operations will be insured with multiyear procurement of meteorological satellites.

(c) My final concern addresses future readiness of the command. While the additional intertheater airlift aircraft, included in the fiscal year 1983 budget, provides some resources to address the severe force projection capability shortfall, it does not solve other critical airlift deficiencies. The KC-10 and Civil Reserve Air Fleet (CRAF) aircraft are efficient bulk and oversize cargo airlifters; however, they are incapable of airlifting the outsize cargo essential to support a balanced fighting force within a combat area. These deficiencies are offset in part by sustaining a modest research and development effort for the C-17 aircraft which will preserve that aircraft as a replacement option for our C-141 and C-130 in the early 1990's and provide an outsize intratheater capability for small austere airfields.

The steps taken to increase readiness of the Military Airlift Command have increased the defense readiness posture of the Nation. However, we need to continue these efforts and capitalize on the investment made in existing forces to maximize their effectiveness.

NAVAL INVESTMENT

Of course, I am concerned about the deficit in our war reserve stocks and its impact on the sustainability of SAC conventional mission forces. However, I am also aware that a continuing investment is required in modernization of our weapon systems, including those of the other Services.

Senator **Humphrey**. Senator Goldwater?

Senator **Goldwater**. All of the commanders are finding out that personnel is probably their number one problem. It is interesting to see that in fiscal year 1981 Tac Air flew 772,000 hours. These figures may not be absolutely correct, but they are rough. How many pilots or rated personnel do you have in Tac Air, do you know?

General Creech. I will have to get that for the record.

[The information follows:]

TAF Rated Fighter Personnel

General Creech. As of 23 Feb. 82, there were 5,118 fighter pilots in the Tactical Air Force (TAF), with approximately 4,237 of these in active flying positions. There were 6,981 total rated officers (fighter pilots and fighter navigators) assigned with approximately 5,652 in active flying positions. Note that these numbers do not reflect personnel in the training pipeline or the rated supplement, and represent lieutenant colonels and below.

Senator Goldwater. I think probably all of you will have that problem, so let me put the question this way and ask you to have your staff prepare an answer.

Start with 1960, then go to 1970, and give me your total flying hours, then the number of rated personnel and what that total breaks down to for individuals. I can understand where MAC would have probably a higher rated personnel flying hour total and this might apply to SAC to some extent, but I don't think it would ever apply in the same way to TAC. I don't think the TAC pilots get enough time.

[Additional information follows:]

Individual Pilot Flying Hour Trends

General Creech. I regret that we cannot answer that query specifically because we do not have data for that time period of sufficiently fine grain to break out the number of rated pilots that actually were in active flying jobs. However, we do have average sortie/hour data available from 1969 on regarding the operational squadrons themselves. This data reveals that the average number of hours that TAC fighter pilots flew declined steadily from a level of approximately 23 to 25 hours per month in fiscal year 1969 to a low of about 12 hours per month in fiscal year 1978. There were several reasons for this, but the fundamental reason was severe budget cutbacks. With the support of the Congress, and especially of this Committee, we have turned that situation around somewhat and increased to a level of about 15 hours per month last year. We are continuing that modest upward trend in fiscal year 1983, but will still be well short of the time needed for full readiness. We feel that we need 25 hours and are programming accordingly for the outyears.

Senator Goldwater. What does the average TAC pilot get a year now?

General Creech. About 15 hours a month or a little less. It varies by model, design and series or aircraft type, but 15 or less is a good average.

Senator Goldwater. Fifteen hours a month?

General Creech. Fifteen hours a month or less. At one time you will recall, Senator, 25 was our goal. At one time, a short time ago as when I was Deputy for Operations in the U.S. Air Force in Europe, we had a floor on the crews of 20 hours. When they got less than that, we declared them noncombat ready. That is the bad news.

The good news is that although it dropped to 12 by 1978, you have supported some increases to get it back up to 15; but it still needs to go much higher.

Senator Goldwater. It still is not enough.

General Davis. Our crews get about 21 hours a month, which is not enough. The goal is about 26 hours a month. In 1970, I believe we were around 6 million flying hours. We now have about 3 million flying hours. That is a 50-percent reduction. That does not mean we have not reduced the total number of airplanes, because we have, and we have reduced the number of pilots; but the proportion is not nearly what it should be. Flying hours have reduced far faster than the number of pilots.

Senator **Goldwater**. General Allen, do you have any comment?

General **Allen**. Yes, sir. In MAC our aircraft commanders in the C-5 are getting 22.9 hours per month; in the C-141, 35 hours per month; and in the C-130, 27 hours per month. That is the active force.

In the Reserve associate force, C-5 and C-141 aircraft commanders are getting 18.5 and 16.5 hours per month, respectively.

Senator **Goldwater**. Will you also include in that study by your staff the cost per hour for the different commands? I don't think we get enough flying time anyplace.

[The information follows:]

MONTHLY FLYING HOURS

The chart below summarizes Strategic Air Command historical flying hours and rated strengths. SAC emphasizes training by aircrew and tracks flying activity in terms of hours per crew per month.

	1960	1970	1982
Bomber:			
Hours flown	814,378	233,501	145,266
Noncrew hours	−172,725	−33,968	−45,020
Hours flown by crews	641,653	199,533	100,206
Assigned crews	2,419	476	420
Hours/crew/month	22.1	34.9	19.9
Tanker:			
Hours flown	396,378	286,247	147,196
Noncrew hours	−33,023	−18,585	−24,552
Hours flown by crews	363,355	267,662	122,644
Assigned crews	1,460	822	619
Hours/crew/month	20.7	27.1	16.5

1960 and 1970 data reflect end of year crews assigned and hours flown. 1982 data include programed fiscal year 1982 hours and assigned crews as of 8 March 1982. Total hours flown are adjusted to account for non-crew flying time expended for initial qualification and overhead training. Assigned crews share in the remaining hours at the monthly rate per crew indicated.

Costs per flying hour for SAC aircraft as of 8 March 1982 are as follows:

Aircraft	Fuel	Support	Total
B-52D	$5,223	$2,174	$7,397
B-52G	5,265	2,332	7,597
B-52H	4,318	2,239	6,557
FB-111	1,799	4,179	5,978
KC-135	2,810	1,478	4,288
EC-135	2,471	1,473	3,944
RC-135	2,477	1,372	3,849
E-4	5,484		
T-38	524	388	912
KC-10	3,285		

Support costs include replenishment spares, depot maintenance and base maintenance material. KC-10 and E-4 maintenance is Contractor Logistics Support. SAC does not have current support cost data for these systems. Fuel costs are based on $1.31 per gallon at average consumption rates.

MAC HISTORICAL FLYING DATA

General ALLEN. The total Military Airlift Command flying hours flown were:

1960	702,332
1970	699,192
1980	699,326

During these time periods, MAC primary cargo aircraft flew:

1960	566,672
1970	687,014
1980	473,488

The number of MAC active pilots by type of cargo aircraft was:

Aircraft	1960	1970	1980
C-118	932	NA	NA
C-124	1,029	(1)	NA
C-133	176	224	NA
C-130	NA	[2] 1,352	798
C-141	NA	1,277	936
C-5	NA	52	280
Total by year	2,137	2,905	2,014

[1] Phasing out.
[2] Tactical Air Command operated C-130's.

The average monthly flying time for individual pilot by type of aircraft was:

Aircraft	1960	1970	1980
C-118	79	NA	NA
C-124	71	(1)	NA
C-133	62	67	NA
C-130	NA	[2] 86	27
C-141	NA	64	35.9
C-5	NA	[3] 11	26

[1] Phasing out.
[2] C-130 average in fiscal year 1968, fiscal year 1969 and fiscal year 1970 data not available.
[3] Aircraft phased out.

The direct operating cost[1] per flying hour for major MAC cargo aircraft is:

Aircraft	1960	1970	1980
C-118	$173	NA	NA
C-124	212	(1)	NA
C-133	454	$954	NA
C-130	NA	[2] 690	$1,172
C-141	NA	440	2,688
C-5	NA	1,235	5,999

[1] Phasing out.
[2] Tactical Air Command operated C-130's; cost figure July 1971.

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[1] Direct operating costs include: Fuel, depot maintenance, civilian pay, supplies, utilities, per diem, and miscellaneous costs.

AIR FORCE TRAINING

Senator **Goldwater**. General Creech, some news media and others have commented on the unrealistic training our forces are receiving. Would you care to comment on that and tactical training in relation to it?

General **Creech**. We are doing everything we can, sir, as you know, to train ever more realistically. Our Red Flag programs at Nellis are fairly well known as realism in action.

More than that, we do composite force training at our home bases. We have flights with the Canadians and we have various kinds of other exercises, including our deployment overseas to the actual collocated operating bases.

As a generalization, the realism of our training is up significantly from what it was 5 years ago. We constantly are looking for ways to make it more realistic, so that we will insure that even though we are fiscally constrained and are outnumbered quantitatively that our crews will be able to have enough proficiency to counter the greater numbers on the other side.

Senator **Goldwater**. About how much time does each TAC pilot get to fly the plane?

General **Creech**. We get them out in Red Flag once a year.

Senator **Goldwater**. Every pilot?

General **Creech**. Every combat pilot that is in the combat outfit we get out to Red Flag once every 14 months. That is for 2 weeks.

COMPOSITE FORCE TRAINING

Senator **Goldwater**. Do you simulate that training at other bases?

General **Creech**. We do mini-Red Flags. We call it composite force training at other locations. We don't have quite the scale and tempo that one can create in a desert, obviously, but it is the same kind of philosophy, the dissimilar air combat training, for example, between various kinds of aircraft and the rest. We have managed to step up our overall realism.

General **Allen**. If I might suggest one other area of personnel readiness, which I think deserves the attention of the committee, is personnel other than the pilots.

RETENTION OF TRAINED PERSONNEL

Because of the pay raise last fall, the state of the economy and other measures, we are starting to see perhaps a turnaround in what has been a major problem with all of us in retention of skilled people. First-term enlistments are up; second-term enlistments are up; career enlistments are up; pilot retention and officer retention rates are up. In the Military Airlift Command for the first time in 20 months, last January, last month, we saw an increase in the number of seven-level skilled technicians in the maintenance force. That might go back down again. It is too early to state it is a trend, but it is certainly a very important indicator to us.

It is only by retention of people that those skill levels go up. Whether this will last, I don't think any of us really knows. In

MAC we are now about 85 percent manned in that middle-level NCO, that staff sergeant and tech sergeant who are so important to our efforts.

If the economy turns around, then it is going to be more difficult. One of my people showed me an advertisement the other day from the Boeing Co., a full-page advertisement. The bottom line was, "If you have ever worked on an airplane, Boeing has a job for you."

PAY RAISES AND DEPENDENT CARE

Another troublesome aspect of the potential problem is that the average airline mechanic today is over 50 years old and around 25,000 are expected to retire in the next 3 to 5 years. With the pay raises that have been negotiated by the unions, their average wage is about $15 an hour as compared with a staff sergeant pay of a little over $7 an hour. The incentive to get out is going to be very strong in the next several years. We are very grateful for the very important people measures that the Congress has adopted in the last several years. There are some more that need to be considered very strongly. First, we have to insure that the annual pay raises keep up with the inflation rate. Second, there is a strong case that should be made for dependent dental care. Third, we need to maintain the present retirement benefits because once you start questioning those, there is a real incentive for people to get out.

Equitable reimbursement for moves is a major sore point with a lot of our NCO's. The last thing, and this is one in which I have a very strong personal feeling, is a G.I. educational bill with provisions for transferability. You know, it is part of the American psyche to want to give their children a good education. The best people that we have, have that feeling the strongest. They are the ones when they are in 12 to 13 years or maybe 10 years and their family starts to come along, that look at the cost of college education and say. I would like to stay in the Air Force. I love my work, serving my country, but I have to get out so that I can educate my children when it comes time for them to go to college.

If we can relieve them of part of that problem, I think that would be one of the strongest measures for retention of skilled people.

RETIREMENT AGE

Senator **Goldwater**. Let me ask you a question that any of you or all of you can answer. Would raising the retirement age of enlisted people and even officers too have a good effect upon the forces? I am thinking of the highly skilled sergeant, a line man, who gets up to retirement age and he is still a young man, but the older he gets the better he gets. I have often used this hypothetical example. I think I would rather see a man in his fifties or even older working on my jet engine, or my avionics, than somebody 18 years old who wasn't quite sure which end of the screwdriver went first.

General **Creech**. The problem, as you know, is that if you keep people too long that stifles career progression below them. We have had periods like that in Air Force history where people were staff sergeants for 12 years. They just won't stay; they will leave.

In your wisdom, you have provided the tools of selective continuation and we are using those quite liberally.

My own view, at least, is that we have the mechanism we need today to play that properly and if one arbitrarily legislated that they would stay longer, you are going to have some by-products that probably you don't either want or expect.

Senator **Goldwater**. I recognize that, but I think there are probably ways we have not looked at that we can overcome that. I have been traveling around base to base. I find a lot of these older people want to stay, and while there might come a time when the disparity in rank will make a difference, I don't know what the percentage will be, but there are many, many men I have talked to who say they want to stay; they are happy; they love their work; but they are being forced to retire.

I don't see the sense of getting rid of a man with all that productivity.

General **Creech**. They can stay for 30 years. If they make normal rank progression they can stay 30 years. It is a viable force at that level as well. If they opt out at 26 years or something, they go out at 42 years of age.

Senator **Goldwater**. They are still young men.

General **Davis**. Poll after poll indicates one of the biggest incentives that helps us with retention is the 20 year retirement clause. The spike occurs at 20 years; another spike appears at 24, and the last big one is at 26 because that is the last pay raise. The reason it is a big incentive is because (a) they can get out while they are still young enough to go to work again. The retirement alone is not enough for them to get by on in the style to which they have been accustomed. They can get out and go to work again.

EXTENSION PROGRAM

As General Creech said, for those chief master sergeants who want to stay, particularly beyond 30 years, there is a liberal extension program. Now it is a very selective one, because not all chief master sergeants are still producing at the level they once were. In that case, the system is better off without them. But to the extent that you extend E-9's, you slow down the promotion flow below them, and that is also a disincentive. Your bright people just aren't going to stay if you have a superannuated force.

Senator **Goldwater**. I understand all of those things. I still think it is something we ought to take a really good look at. Let us keep these fellows working who want to work. If they want to get out, let them get out.

General **Creech**. We agree. People who opt out at 20 years of service—and many of them are bright, 20 or 24 years of service, whatever—we would prefer to keep, and we think we will. Our career reenlistment rates are up now that we are paying them what they consider to be a fairer wage than they were getting in the late 1970's with the pay caps. We are keeping a lot more of those people, a great many more, as a matter of fact, so that is helping immensely, but you can't legislate them in.

Senator **Goldwater**. I just wanted your thoughts on it. We will talk about it again.

Senator **Humphrey**. The remainder of my questions I will reserve for the executive session.

Senator Levin?

SELECTIVE REENLISTMENT BONUS

Senator **Levin**. I have one question following up on Senator Goldwater's question about keeping people.

Wasn't there a recent program which we adopted which would encourage people to stay in? We gave them bonuses—retirement benefits cost us some money up front, but saved us some money later on—which will be repealed under this budget to save money. Are you familiar with it at all?

General **Davis**. I am not. We raised the selective reenlistment bonus, which is the single most important factor to improve retention, but I am not aware of any such proposal. Maybe Peter can give you the details.

Senator **Levin**. It was a program that cut the 20-year retirement benefits.

General **Davis**. Oh, my goodness, yes, the one that passed, that grandfathers everybody and goes to high-three averaging. There were several studies, notably the infamous Zwick study, which looked at the retirement system. Blue ribbon panels have over the years looked at retirement systems.

My colleagues will support me in this. The biggest retention item is the 20-year retirement system and if you fool with that you really screw up the system.

Senator **Levin**. Let me follow up on two other questions.

General Creech, was there a participation on the part of Tactical Aircraft under your command in Bright Star II?

General **Creech**. Yes, sir.

Senator **Levin**. One other question for General Creech, and this has to do with the sustainability goals of our Allies in Europe, their air forces in Europe. How would you compare the way their current capability to wage a conventional war compares with ours in days of supply? Can you give us a general overview of that?

General **Creech**. I can characterize it for you. All of us are not where we need to be. It varies by country. Some of the countries are somewhat better off in terms of sustainability than we are. Generally speaking, I would say if you average it out, we are roughly equal.

Now, of course, we have programs that we are trying to get started with the additional money for spares and so forth to increase our sustainability. One would hope if they can get 3 percent real growth in their defense budget, as we hope to encourage them to do, that they could do the same. But we all have shortfalls in sustainability.

Senator **Levin**. It is on the average about where we are, would you say?

General **Creech**. About where we are. In other words, we would probably all run out of the wherewithal to fight within a matter of one or two or three days of one another.

Senator **Levin**. Does their sustainability posture affect our own strategy and planning?

General **Creech**. Yes, sir.

Senator **Levin**. Finally, and this is just to amplify the request I made before—I asked each of you whether you have sufficient funding in the 1983-87 period in your readiness accounts, for the record. When you do that, would you identify by dollar amount and program any shortfalls?

General **Allen**. Yes, sir.

General **Davis**. Yes, sir.

General **Creech**. Yes, sir.

Senator **Levin**. Thank you.

Senator **Humphrey**. We will ask those who do not have a security clearance to leave the room at this time.

General Hecker, will you assure me that everyone on your end is qualified?

General **Hecker**. Yes, sir.

[Whereupon, at 11.40 a.m., the subcommittee proceeded to executive session.]

EXECUTIVE SESSION

Senator **Humphrey**. Without objection, the declassified prepared statements of General Davis, General Allen, and General Creech will be entered in the hearing record at this point.

[The prepared statements follow:]

PREPARED STATEMENT BY GEN. B. L. DAVIS, COMMANDER IN CHIEF, STRATEGIC AIR COMMAND AND DIRECTOR STRATEGIC TARGET PLANNING, DIRECTOR STRATEGIC CONNECTIVITY JOINT CHIEFS OF STAFF

INTRODUCTION

Mr. Chairman and members of the Committee, I welcome the opportunity as Commander in Chief of SAC, Director of the Joint Strategic Target Planning Staff, and Director of the Joint Strategic Connectivity Staff, to appear before you today to discuss SAC's readiness to carry out its primary nuclear deterrent mission as well as our ability to contribute to conventional operations through long range bombardment, aerial refueling and mobility enhancements.

Although tough decisions still must be made regarding the scope and focus of our military force structure, we have taken a comprehensive first step in the right direction with the appropriations for Fiscal Year 1982. The Congress is faced with an extremely difficult task—the problem of allocating limited fiscal resources among many competing and urgent requirements. I applaud you for the courage and foresight you have shown toward meeting the defense needs of this nation. Today I will provide you an assessment of our current readiness and the steps I believe we must take to maintain deterrence in the future.

The primary SAC mission—to deter the Soviet Union from nuclear attack or use of coercion under threat of attack—is unique among the combat commands. To deter with high confidence, we must be capable, under all conditions, of responding to any level or type of nuclear attack in a way that would deny the Soviet Union any gain and leave the U.S. in a position of relative superiority. This type of deterrence requires ready, modern forces and an unquestioned resolve to employ them as necessary in our national interests.

Readiness and modernization are equal partners in the deterrent equation. Although our modernization programs are vital, their impact on the strategic balance will not be felt immediately. In the face of the existing Soviet threat, we must maintain high levels of readiness today while continuing to modernize for the future.

I believe we can best mitigate the existing dangers and sustain deterrence by following a phased, three-step process:

First, we must maintain the readiness of existing forces.

Second, we should improve our near-term warfighting and power projection capabilities.

Finally, we must sustain our efforts to restore the long-term strategic balance by completing the President's modernization program.

I would like now to discuss all three steps from an operational commander's perspective. As the focus of this committee is on readiness, I will address three primary issues which impact this area—people, operations and maintenance, and spare parts. Because I believe it is also important to provide an update on future trends in the strategic balance, I will touch on specific modernization initiatives following my remarks on current readiness issues.

READINESS

Although I am concerned about some specific areas regarding SAC's current readiness posture, and I will address those areas in a moment, there should be no question about the present capability of our nuclear forces—SAC can accomplish its nuclear warfighting mission. If called upon, our forces can inflict massive damage to any aggressor under all conditions of war initiation. Two evaluation criteria we use to evaluate SAC's readiness support me in this statement: Combat Readiness Ratings (C-Ratings) and Operational Readiness Inspection (ORI) results.

C-Ratings are based on four objectively measured areas: personnel, supplies, equipment and training. In addition, unit commanders have a subjective input to the rating through their evaluation of factors such as unit performance and morale. These measures of combat readiness range from C-1 to C-5, with C-1 and C-2 indicating full combat readiness.

[Deleted.]

[Figure 1—deleted.]

C-Ratings are compiled daily to provide an accurate picture of SAC's current readiness. Figure 1 shows the 13 February 1982 C-Ratings for bomber, missile, tanker and reconnaissance units. This figure represents a typical set of daily SAC C-Ratings.

[Deleted.]

Results from ORIs also attest to SAC's current level of readiness. These inspections, the most thorough and demanding evaluation administered by any military command of any nation, test our warfighting ability under conditions as close to those of actual combat as simulation and safety allow. Despite the challenge of maintaining obsolescent weapon systems at extremely high levels of readiness, the past year's ORI results show that our units maintain a high degree of skill and proficiency.

[Deleted.]

[Deleted] the combined results from C-Ratings and ORIs show that SAC stands ready today to accomplish its primary nuclear mission.

Although SAC is commonly thought of as the command responsible for maintaining peace through nuclear strength, our forces have significant potential for conventional applications through long range bombardment, aerial refueling and mobility enhancement.

The manned bomber's ability to rapidly project massive firepower in support of conventional operations was demonstrated during the recent Bright Star exercise when Strategic Projection Force (SPF) B-52H aircraft carried out a nonstop, round trip mission from the continental United States to Egypt. I will discuss this and other potential conventional roles in conjunction with my remarks on strategic modernization. At this point, I will address specific readiness issues which warrant Congressional attention.

PEOPLE

SAC preparedness depends first and foremost on its people. As important as our modernization programs are, even the most sophisticated weapon system will not enhance deterrence without quality people to operate, support, and maintain it. In today's technology-intensive environment, our professionals must be highly skilled in disciplines essentially unheard of by their predecessors 20 years ago. The bottom line is simple—to meet our nation's defense requirements we must recruit and retain the best.

Pay and entitlement legislation over the past two years has had a visible and positive impact on our ability to recruit and retain. I appreciate the outstanding support Congress has shown for pay comparability and hope this critical area will continue to receive your attention.

A comparison of fiscal year 1979 and fiscal year 1981 officer retention rates illustrates the improvements we have enjoyed in this area:

[In percent]

	Pilots	Navigators	Support officers	Engineers
Fiscal year:				
1979	21	42	38	19
1981	51	60	47	25

Statistics for airmen reenlistment tell a similar story:

	First term airmen	Second term airmen
Fiscal year:		
1979	34.3	53.4
1981	39.0	67.9

These figures show a significant improvement over past trends, but we are not yet well. These highly skilled, educated personnel are vital to the development, support and operation of every system SAC possesses. We must continue our efforts to provide the incentives necessary to retain people in these critical categories.

One problem area we face is recovering from our past failure to retain experienced supervisory personnel. This issue is illustrated in the missile maintenance skill areas where we are fully manned, but very short of skilled middle-level NCOs. This situation is particularly significant in view of the projected demands for those skill areas in the 1980s:

Titan II deactivation will demand prolonged maintenance support.

Ground Launched Cruise Missile (GLCM) deployment in Europe will begin drawing off experienced NCOs from the TITAN II and Minuteman forces in late 1982.

Large numbers of NCOs will continue to be needed to maintain the Minuteman force and, eventually, for deployment of the MX missile in Minuteman silos.

We have to increase the number of NCOs in the missile maintenance field as quickly as possible to insure our continued ability to maintain the SAC missile force. However, the hard truth is that it takes four to six years of training before a recruit can replace a mid-level NCO who has left the service. This carries a large price tag in time, dollars, and readiness. We can only replace this NCO cadre by retaining the first term NCOs. And to do that, we must provide annual pay increases that reflect cost of living increases and continue to use higher variables of the Selected Reenlistment Bonus.

I believe the improvements in retention we have recently witnessed are due largely to increased Selective Reenlistment Bonus funding. This program is vital for keeping the experienced middle level manager we need. Our investment in retaining these highly skilled people now will reduce the long-term investments required to recruit and train their replacements in the future.

In addition to financial compensation, our people also need to feel they hold a respected position within society. In the fairly recent past, many of our people in uniform felt alienated from mainstream American society. We are rapily recovering from this unfortunate and undeserved situation, but the momentum must be maintained. Quality of life issues are central in this effort.

I will briefly touch on some of these which require attention. The GI Education Bill should be expanded to serve as an added inducement for recruiting. Authorizing transfer of Education Bill rights to dependents could have a significant impact on retention. Adequate hospital care for families and increased CHAMPUS coverage are programs that would also add significantly to our retention efforts. Costs associated with moving and the purchase of a new home are placing a severe hardship on many of our people. Private companies do much more to alleviate these strains than the military services. Reimbursement of some of these costs should not be viewed as a benefit, but as an operating cost incurred by the military to move personnel. The competition between the military services and the civilian economy for quality personnel is becoming more intense as population growth declines and the potential labor pool decreases. One recent study revealed that between 75,000 and 80,000 civilian aerospace workers will soon reach mandatory retirement age. Therefore, it can be expected that key industries will soon begin to feel a manpower pinch and our competition with the civilian market will intensify.

Civilian employers, always able to outbid the services in terms of financial rewards, now offer very attractive benefits as well to attract skilled personnel—packages which include comprehensive health plans, educational benefits and generous pay incentives. The military services must offer a competitive package to recruit and retain the skilled, educated people we need. Monetary incentives and benefit packages will not, by themselves, produce a dedicated, professional military member; but, they do serve as strong initial incentives and provide the services the opportunity to demonstrate to our young people the other rewards of a military life.

Recent pay and entitlement initiatives passed by Congress have done much to enhance the well being of our people. In December 1981, SAC commissaries took in $144,773 in food stamps. This was a decrease of 26 percent from the December 1980 figure. This is just one example of the positive impact recent legislation has had on our members' standard of living. I appreciate the strong support Congress has shown for comparability and quality of life issues.

With your help we have also begun to turn the tide in retention. But continued Congressional support is required. We cannot let up on higher selective reenlistment bonuses and compensation increases just because retention has taken an upward turn.

OPERATION AND MAINTENANCE

Because they have been incorrectly associated with the "tail" portion of the "tooth and tail" concept of military operations, Operation and Maintenance (O&M) programs have historically been subjected to chronic underfunding and nonprogrammatic reductions.

I am pleased that recent O&M funding—especially in fiscal year 1982—has reversed this trend. The Congress is to be commended for its efforts in this area. Close review of O&M, both in the authorization and appropriation process, has revealed the importance of this account for both readiness and the quality of life for our people. The truth is that O&M is SAC's "bread and butter" account. Every dollar we spend on O&M contributes directly to our current readiness posture. It pays for the fuel we use to fly; the utilities to operate our physical plant; the 13,000 civilian personnel we employ; and the supplies we use—down to and including paper and pencils.

While O&M funding has improved significantly, the benefits of recent increases have been diminished through the dual effect of inflation and the relative inflexibility of most O&M costs. Thus, in spite of receiving 91 percent of our fiscal year 1982 request, SAC is still compelled to meet its mission with O&M funds short of the total requirement.

As these increased funding levels take effect, we will be forced to make fewer tradeoffs between protecting our mission readiness and improving our physical plant and the quality of life of our personnel. The long term consequences of such tradeoffs in the past can be illustrated by the continuous growth in our Backlog of Maintenance and Repair (BMAR).

SAC's facility Backlog of Maintenance and Repair (BMAR) is not a new subject to this committee. BMAR is the most commonly accepted barometer for the health of our physical plant. Prior to fiscal year 1981, BMAR was growing at an accelerating rate; however, thanks to improved funding beginning last year, we anticipate greatly reduced BMAR growth through fiscal year 1982. For the first time in years, our people are beginning to see large scale improvements to their working and living environment. However, even with increased funding levels, SAC still expects to have a backlog of approximately $187 million in unfunded maintenance and repair projects at the beginning of fiscal year 1983. If current trends in Congressional support continue, we should be able to reduce BMAR to a manageable level by fiscal year 1988.

Aircrew training is another critical readiness area dependent on O&M funding. Aircrew readiness requires a well constructed flying hour program—continuing practice at basic airmanship, target penetration and weapon delivery is the only effective way to produce skilled combat-ready aircrews.

The current SAC flying hour authorization is barely adequate to maintain the minimum levels of proficiency required for our aircrews. However, these flying hour authorizations are basically a reflection of fact of life problems. At present we could not support any substantial expansion in our flying hour program. Fuel and other expendables to support added flying hours can be provided easily and quickly, but the lead time for spare parts is about two years. Because of inadequate funding for spare parts in the past, we do not now have sufficient stock on hand to support appreciable increases in flying time. Simply stated, we are faced with the problem of needing more flying hours, but lacking the logistic capability to fly them because of lack of replacement parts.

Recently, the Congress has made the difficult budget decisions necessary to correct this situation. We received increased authorizations in the fiscal year 1981 and fiscal year 1982 budgets for larger levels of necessary spare parts, but long procurement lead times mean that we will not have the adequate hardware on hand much before fiscal year 1984. At that time, we will be able to support needed increases in actual flying time authorization.

We must insure our crews receive the flying time they need to maintain combat proficiency. I am confident the Congress will continue to support this important readiness category.

To make the most of the limited flying hours available, our aircrews need to practice in a realistic low-level training course. Our current facilities are quite good in many respects, but are lacking in two important areas: the number of low-level routes and the sophistication of the simulated threat.

Improvements are needed to prepare our aircrews to cope with steadily improving Soviet defenses and highly varied terrain in the target area. Current SAC improvement plans include expansion of the existing Strategic Training Route Complex (STRC) to increase the capabilities of less productive routes and provide more variety. The $4.1 million Total Obligational Authority requested in the fiscal year 1983 budget will provide a significant first step in the development of this training complex. When combined with new, highly mobile threat emitters, this improved complex will present a far more realistic training environment. The more realistic and frequent their training, the more prepared our crews will be to perform their assigned task in wartime.

SPARE PARTS

The effect of the current shortage of spare parts was briefly covered in my discussion of the flying hour program. However, I will now address this aspect of SAC's operation in more detail.

Aircraft spare parts requirements exist in three key categories, each of which impacts SAC readiness and sustainability. Figure 2 identifies these categories as Peacetime Operating Stock (POS), War Readiness Spare Kits (WRSK), (which includes prepositioned spare parts), and depot war reserve stock, called Other War Readiness Materiel (OWRM). This chart shows the funded and unfunded SAC requirements from fiscal year 1980 through fiscal year 1987. As is evident, the Congress provided excellent support for these programs in fiscal year 1982 by fully funding two categories and making progress for the first time in the third.

Peacetime Operating Stocks are those needed to keep our online weapon systems in the air to meet daily operational and crew training requirements. Because of the approximate two-year procurement lead time, the shortfalls in fiscal year 1980 and fiscal year 1981 are affecting our readiness now and we will not begin to "get well" until the fiscal year 1982 increase begins to take effect. Sufficient numbers of "on the shelf" spare parts are essential to maintain sortie alert rates and meet daily training requirements. A lack of sufficient spares forces us to cannibalize good parts from one aircraft for another, thus limiting the number of weapon systems that can be made fully mission capable. If appropriated as submitted, the fiscal year 1983 budget provides sufficient funding to keep POS in line with requirements.

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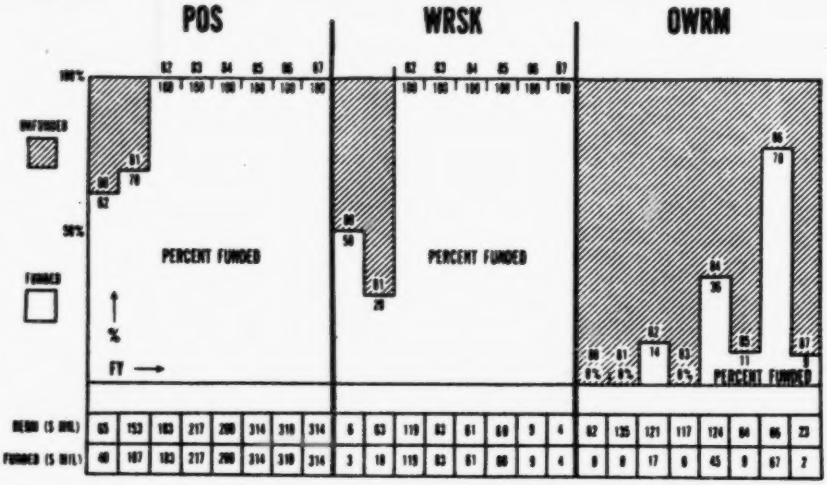
SPARE PARTS REQUIRED vs FUNDED



REQD ($ MIL)	65	153	183	217	280	314	318	314	6	63	119	83	61	60	9	4	82	135	121	117	124	84	86	23
FUNDED ($ MIL)	40	107	183	217	280	314	318	314	3	18	119	83	61	60	9	4	0	0	17	0	45	9	67	2

UNCLASSIFIED

FIGURE 2

[Deleted]. As Figure 2 shows, WRSK was underfunded in fiscal year 1980 and fiscal year 1981. This shortfall in WRSK, when combined with that in POS greatly increases the impact on current readiness. It affects our own mission readiness as well as our ability to provide tanker support to tactical and airlift forces. The fiscal year 1982 appropriation includes sufficient funding to fill current WRSK requirements, but it must again be emphasized that due to long lead times, we will not realize tangible results until approximately 1984.

OWRM provides the reserve stock necessary to sustain wartime flying levels until our industrial base can catch up with demand. In the nuclear arena, OWRM is required to provide a broad base of spare parts to support dispersal, survival, and protracted operations. As indicated in Figure 2, there are severe shortages in current and projected OWRM levels until fiscal year 1986. Because of the two-year lead time involved and the low level of near-term programming, OWRM stocks will not reach acceptable levels before fiscal year 1988. I urge support for full funding of OWRM so SAC can support either the strategic nuclear programs or long-term conventional combat operations.

Each of the categories discussed above represents a logistics support element essential for SAC sustainability. We must continue to maintain the full funding levels currently provided for POS and WRSK and begin serious funding for OWRM deficits to provide adequate logistics support in the future.

In the ICBM area, only one category of spares exists—missile replenishment spares (analogous to aircraft POS). These spares are the repairable assets maintenance needs to keep our missiles on alert. The program through fiscal year 1987 provides sufficient funding for our requirements. However, difficulties remain with depot repair capability of these spares. Shortages in test equipment, repair dollars and manhour availability prevent prompt asset repair. I urge you to support efforts to upgrade our spares repair capability.

The fiscal year 1982 appropriations represented an excellent first step toward resolving spare parts shortages. For the first time in several years, Congress provided full funding for POS and WRSK. Your continued support will pay high dividends in our improved warfighting capability.

BEST DOCUMENT AVAILABLE

READINESS CONCLUSIONS

I cannot conclude any discussion of preparedness without giving due credit to the men and women of SAC for their superb efforts in insuring the continuing readiness of their units. They are ready and able to successfully confront any challenge this nation may face. It is now up to our civilian and military leadership to continue the momentum of recent legislative initiatives. The Congress, in its far-reaching budget actions of the last two years, has done much to correct previous deficiencies in areas affecting the readiness of this command and to support our people in uniform who have performed so well for so long.

STRATEGIC MODERNIZATION

Just as sustained readiness is the key for deterrence today, modernization is the key for the future.

Modifications to our existing strategic forces have improved their capabilities and extended their service life, and the readiness programs I have outlined will insure that they will perform to the limits of their inherent capabilities in combat. But, even with these considerations in mind, these weapon systems lack many of the warfighting and survivability attributes called for in current national guidance.

Today's forces were designed to support a strategy of [deleted]. Strong evidence indicates that the Soviets may not subscribe to the strategy of mutal assured destruction and have structured their forces to provide a much more flexible and selective warfighting capability. They are prepared to [deleted]. Therefore, we are concerned that the threat of a full-scale U.S. attack is no longer credible as a deterrent for all potential nuclear scenarios.

Current national guidance reflects this concern by directing U.S. forces be made more survivable, more enduring, and more capable of decisive and appropriate action in response to any Soviet attack. During the last decade, the guidance has clearly evolved from a philosophy of assured destruction to a less simplistic view of deterrence, requiring a true [deleted].

SAC has long believed that a credible warfighting capability is a central element in a strong deterrent posture. Such a capability is essential to deter the Soviets, who view warfighting rather than retaliation or assured destruction as the fundamental mission of strategic forces.

Since 1977, when a state of essential equivalence was judged to exist, our estimated warfighting capability has declined while Soviet capabilities have continued to increase. In fact, today we have [deleted] the capability to attack the broad range of Soviet military targets we had in 1977. Two factors contributed to this decline in this strategic balance.

The first factor was one over which the U.S. could exercise a large degree of control—the pace of our strategic modernization program. During the period from 1977 to 1979, several decisions and fact of life changes in our modernization plans had an adverse effect on the projected balance.

The B-1 bomber was cancelled; the deployment of MX was delayed; the deployment of the air launched cruise missile was delayed; and the TRIDENT delivery schedule was stretched out due to cost and technical problems.

The second factor was the tremendous growth in projected Soviet strategic offensive capability.

At a time when the U.S. was exercising unilateral restraint and searching for solutions to our strategic problem through arms limitation negotiations, the Soviets demonstrated a single-minded resolve to expand their military power. During the 1970's—the period of "detente"—Soviet military spending accounted for approximately 11 to 13 percent of their gross national product. U.S. spending for military activities in the same period declined from roughly eight percent of the GNP in 1970 to less than five percent in 1979.

The Soviets have placed particular emphasis on developing their strategic forces. Measured in dollars, Soviet spending on strategic modernization during the 1970s was nearly three times that of the United States. The improvements financed by these expenditures have led to drastic upward adjustments in projections of both the quality and numbers of Soviet weapons.

In combination, the expanded Soviet warfighting capability and our own lack of modernization have created a gap [deleted].

If allowed to endure, this gap—often referred to as a "window of vulnerability"—will undermine deterrence and stability and create the potential for Soviet coercion in a crisis. It is this danger that underlies the requirement for U.S. force modernization. To meet national strategy and insure deterrence, we must insure that the far-sighted modernization programs now underway do not falter.

I believe each of the following five elements is essential to rebuild our strategic deterrent force:

A dual track bomber program, providing a B-1B bomber in the near term and vigorous development of a next generation advanced bomber.

A phased program to improve the warfighting capabilities of our ICBM forces and to reduce their vulnerability to Soviet attack.

An assortment of programs geared toward vastly improving our ability to communicate with and control our combat elements under all conditions.

Continued deployment of the TRIDENT submarine and new submarine launched missiles.

Improvements to our strategic defenses, in coordination with Canada, through procurement and deployment of more sophisticated interceptor aircraft and improved warning systems.

The President's program should be considered and supported in its entirety, and I appreciate the support the Congress has already shown in its appropriations for fiscal year 1982. We've taken a first step on the road to strategic recovery.

In concert, these programs will provide the forces and supporting systems required to maintain our long-term deterrent strategy. The President's plan—the most comprehensive since the Kennedy administration—represents a phased, orderly approach to correcting the strategic imbalance.

I will move now to a discussion of specific modernization initiatives from an operational commander's perspective, placing particular emphasis on those subjects having a direct impact on SAC.

BOMBER FORCES

Manned aircraft in a pure penetrating role, and as shoot-and-penetrate and pure stand-off cruise missile carriers, will continue to be a critical element in this nation's strategic warfighting capability.

Bombers are the most flexible of our strategic weapon systems. They can be used to show resolve through increased states of readiness or launch under positive control if necessary. They are the only strategic systems that have been battle tested and repeatedly demonstrated their utility. They possess the invaluable flexibility to adapt to the changing conditions of war by adjusting their route to avoid threats and by assessing damage and restriking targets as necessary.

Our current bomber force of B-52 aircraft has served the nation very well. Through a series of modifications, we have been able to extend the useful contribution of our B-52s in a penetrating role despite a more severe threat environment than they were designed to meet. [Deleted.]

For the present, I am confident that our B-52s can accomplish their assigned penetration mission. In the future, however, they will have increased difficulty penetrating improved Soviet defenses.

The vast Soviet air defense system is currently undergoing a broad modernization. This modernization process will provide a significant improvement in their ability to detect and track incoming penetrators. In addition, their interceptor-capable force of over 4400 aircraft is being updated to include the modified FOXBAT and two new interceptors. By 1990, the Soviets are expected to have a total interceptor-capable force of [deleted] aircraft, [deleted] percent of which will have a true look-down/shoot-down capability. Interceptor effectiveness will also be increased through expected deployment of up to [deleted] Soviet Airborne Warning and Control System (SUAWACS) aircraft. Added to the threat of interceptor aircraft is the SA-10 surface-to-air missile, capable of low altitude intercept and expected in large numbers by 1990.

Although these improved defenses will not deny the B-52 access to all targets, effective denial could be achieved against those targets the Soviets choose to defend heavily in the mid-to-late 1980s. For targets out of range of ALCM and SLBM, coverage of these targets would be limited to ICBMs. [Deleted.]

For reasons already stated, I disagree with those who argue that stand-off weapons—such as the ALCM—are sufficient to satisfy the tasks at hand. In my view, the spectrum of conflict is so diverse and demanding that the role of the penetrating weapon system cannot be supplanted. Several studies have shown that a proper mix of cruise missiles and penetrating bombers is needed to maximize force effectiveness. A stand-off, "cruise missile only" force would limit our options and flexibility and significantly ease Soviet defensive problems. Additionally, current range limitations prevent cruise missiles from striking deep Soviet targets from stand-off carrier positions. The cruise missile is an extremely promising weapon, but should be seen as a valuable complement to the manned penetrator—not a replacement.

For some time, SAC has advocated a dual track bomber program. Thus, I strongly support the President's decision to proceed with deployment of the B-1B and to aggressively pursue development of the Advanced Technology Bomber.

The B-1B is the most important element in the President's program for improving our near-term warfighting capability. With an IOC in 1986, it is the quickest, most effective option we have for meeting the increasing demands of national strategy and narrowing the strategic imbalance.

For at least the early part of its life, we at SAC believe the B-1B can make the greatest contribution through employment as a penetrator. With its reduced radar cross-section (RCS) and potent electronic countermeasures (ECM) equipment, the B-1B will achieve high penetrativity through its ability to severely complicate Soviet attempts at detection and interception. Moreover, as a modern and manned system, it possesses the inherent flexibility and growth potential to adapt to changing threats through changes in tactics and equipment.

The RCS of the B-1B is about one-tenth that of the initial B-1, making it much harder for enemy radars to detect. [Deleted.] In combination with a high speed, low altitude entry profile, the low RCS and high ECM effectiveness will allow the B-1B to penetrate Soviet defenses well into the 1990s.

As the B-1B comes on-line in significant numbers in the late 1980s, the B-52 will transition to a shoot-and-penetrate role, then to a pure stand-off cruise missile role. [Deleted.] This blend of complementary capabilities will maintain the viability of our bomber force while providing us time to complete the second phase of the President's bomber modernization program—development of the Advanced Technology Bomber (ATB).

Several very promising technologies in propulsion, light-weight materials, reduced radar visibility and other areas are in development to provide a bomber capable of penetrating Soviet defenses well into the 21st century.

ATB deployment in the 1990s will provide a "Force Multiplier Effect" adding value to the 1980s B-1B investment. [Deleted.] By the same token, [deleted]. The diversity these two aircraft provide will insure a continued U.S. ability to penetrate Soviet airspace and attack important targets. As the ATB becomes available, the B-1B can continue to penetrate or transition to the shoot-and-penetrate role. Thus, the ATB will maintain a proper bomber force structure and insure a continued capability to penetrate throughout the 1990s—the same benefits provided by the B-1B well into the 1990s. Based on our near-and long-term strategic needs, this type of phased and orderly bomber modernization schedule makes the most military sense.

As exciting as the ATB concept is, we must not abandon the B-1B in an attempt to accelerate ATB development. There is, at this point, no Advanced Technology Bomber; there is only a very promising collection of technologies we are beginning to pull together for possible application to a future bomber design. The proposed dual track program allows the ATB to mature at a fast but orderly pace toward [deleted] 1990s IOC. Such a schedule permits completion of major configuration studies and allows time to improve our confidence in design, producibility, and maintainability. It will field a new strategic penetrator before the B-1B penetration capability is at risk.

Concepts and technologies will not deter the Soviets in the near-term. The B-1B is needed now, both to reduce the disparity between U.S. and Soviet strategic capability and to provide an effective penetrator during the remainder of the 1980s and well into the 1990s. When the ATB becomes available—and I have every confidence it will—the combination of advanced bombers, B-1B, and cruise missiles will maintain the viability of our bomber force into the next century.

ICBM FORCES

For over a decade, ICBMs have been the mainstay of our day-to-day strategic deterrent force. Their alert rate, reliability, and communications links are superior to those of any other strategic system. They can deliver a devastating counterpunch in about thirty minutes with a combination of flexibility, accuracy, and yield that renders them effective against a very wide range of targets.

As this committee is well aware, the strategic equation is changing dramatically. Our Minuteman force is aging, the Soviets continue to produce and deploy new ICBMs at a remarkable pace, and the gap netween U.S. and Soviet ICBM capabilities continues to grow. The decisions we make over the next few years will shape the fate of our ICBM force and, ultimately, SAC's ability to effectively carry out its deterrent mission.

There are actually two separate and distinct problems driving our need for ICBM modernization—the need for improved warfighting capability and the need to increase the survivability of our land-based ICBMs. The President's modernization program provides a phased, orderly approach to solving both.

[Deleted.]

Soviet ICBM silo hardness is increasing [deleted] with ongoing conversion, modification and retrofit programs for their third and fourth generation ICBMs. Our current Minuteman force is effective against a wide range of hardened Soviet targets, and we are taking steps which will improve its effectiveness. [Deleted.] The MX missile—however it is based—will make a very substantial contribution toward bridging this gap in warfighting ability by providing the counterforce potential necessary to hold improved Soviet ICBM silos at risk.

MX deployment is particularly important in that it will provide the U.S. with a prompt counterforce threat. Although the B-1B will do much to improve our near-term warfighting ability, the silo-deployed MX is needed for that important category of super-hardened Soviet targets which require a time-urgent response. Examples of such targets would be the previously discussed ICBM silos [deleted]. In addition to improving the near-term strategic balance, initial MX deployment will open the production line and lay the foundation for long-term deployment.

The increasing vulnerability of U.S. ICBMs to Soviet attack is the second significant problem driving the need for modernization of our land-based Triad leg. Soviet ICBMs already pose a severe threat to our Minuteman force. By the end of the decade, projected Soviet improvements in accuracy and fractionation will enable them to conduct [deleted] attacks against U.S. ICBMs and still retain a very large coercive residual force. Assuming current U.S. ICBMs ride out the full attack, [deleted]. Although there is currently general agreement on the magnitude of the potential threat facing our ICBMs, there is much less agreement on what action the U.S. should take to avoid or alleviate the threat. Some have suggested that the appropriate response would be to abandon ICBMs altogether—I emphatically reject that approach.

We cannot abandon the ICBM leg—our only prompt strategic delivery system—just because survivability is a tough issue. In line with the President's program, we must continue our research and development efforts to reach a long-term basing decision in 1983. MX deployed in sufficient numbers is a vital element in our efforts to maintain the integrity of the Triad and preserve the extremely valuable ICBM characteristics previously discussed. If we were to abandon ICBMs, future threats to our bombers or submarine-launched missiles would leave us in an extremely dangerous position.

We must accept in advance that we are unlikely to identify a perfectly survivable basing mode for MX—just as bombers and submarines are not perfectly survivable. What we must seek is a combination of survivability and deployment size that will maintain our long-term warfighting capability.

The President's plan for ICBM modernization is a sensible, orderly approach much like the plan for bomber modernization. Silo-based MX will provide badly needed near-term improvements in warfighting capability—the B-1B will do the same for the bomber leg. Just as the ATB will insure a continued penetration capability in the next century, sufficient numbers of MX in a suitable long-term basing mode will maintain the ICBM as a viable weapon system and key element in our deterrent posture. In light of fiscal reality and military necessity, two-step ICBM modernization is a sensible path to follow.

COMMAND CONTROL COMMUNICATIONS AND INTELLIGENCE (C^3I)

The President emphasized that C^3I improvements will be accorded the highest priority in our strategic modernization programs—I agree with that position.

The demands placed on C^3I by our strategy are as stringent as those placed on the forces themselves. In the past, strategic C^3I systems have not received the attention they deserved. Although they account for a relatively small fraction of total expenditures, these systems are indispensable to the effective employment of all our strategic weapon systems.

Our C^3I network must provide responsive and enduring support to the NCA and strategic forces through all levels of conflict—from a low level exchange through a massive homeland-to-homeland exchange followed by a protracted series of lesser intensity strikes. C^3I systems must detect enemy attacks, assess their effectiveness, and transmit processed warning information to the NCA for informed decision making. They must then transmit that response to all applicable combat forces and commanders for implementation. There is considerable concern that our current C^3I systems may not be adequate to these crucial tasks.

As with our weapon systems, the existing C^3I systems were designed to support a one-time retaliatory response under the assured destruction philosophy. [Deleted.]

During a benign pre-SIOP environment, SAC is confident in its ability to support the JCS and NCA. [Deleted.]

The President's program includes a very broad range of badly needed C^3I improvements:

The survivability and performance of our satellite sensors and ground based warning radars will be improved.

Airborne command centers will be upgraded and made more survivable.

Communications links to all elements of the TRIAD will be strengthened.

Aggressive R&D will be pursued for development of a survivable, long-term C^3I network.

When fully implemented, these programs will go far toward insuring our C^3I systems can implement national strategy under all conditions of war initiation. In line with the President's proposals, SAC has the following specific recommendations for upgrading our space-based C^3I capabilities:

We should procure and launch additional Fleet Satellite Communications (FLTSATCOM) satellites to bridge the satellite communications gap until the Military Strategic Tactical and Relay (MILSTAR) system is deployed.

The MILSTAR system should be deployed as quickly as possible to take advantage of improved EHF anti-jam features [deleted].

Increased emphasis should be placed on R&D funding for the DSP II program. An advanced, follow-on DSP system will be required to provide high confidence tactical warning and attack assessment in the 1990s.

The IONDS and NAVSTAR GPS systems are both high priority programs and merit the support required to stay on track and on time.

Many of the President's proposals will lead to marked C^3I improvements in the mid- to long-term; however, near-term programs to correct existing deficiencies are also needed. Specific SAC recommendations include:

Aircraft Alerting Communications EMP (AACE) upgrades to protect critical communications equipment at main operating bases. These upgrades will help insure Emergency Action Message relay to the alert bomber force.

Groundwave Emergency Network (GWEN) to provide a CONUS-wide communications net survivable in a nuclear environment.

LF/VLF receivers to provide secure, enroute connectivity for bombers.

To improve our connectivity today, I have initiated a series of low cost "instant" fixes to reduce EMP vulnerabilities at SAC Headquarters. When combined with the near-term programs listed above, these fixes will provide major connectivity improvements between SAC Headquarters and SAC forces in a nuclear environment.

For the future, close attention is required to insure that our C^3I systems keep abreast of follow-on weapon systems. The accurate, survivable weapon systems discussed earlier will be of limited value if they are isolated from the NCA in times of crisis.

TANKER FORCES

SAC is the single manager of a national asset that is the key to global projection of U.S. power—the tanker fleet. Unfortunately, the combined demands of strategic, airlift, and general purpose forces have overwhelmed our existing refueling capacity and created a tanker shortfall. The shortfall threatens to degrade the effectiveness of all forces which depend upon aerial refueling.

The current SIOP is degraded by the existing tanker deficiency. SIOP tanker requirements are steadily increasing due to expanded target coverage, aircraft modifications which increase weight and drag, and more extensive use of low level tactics as the Soviet defensive threat increases. In a fully generated case, [deleted].

Our analyses indicate we are currently [deleted] KC-135As short of SIOP support requirements. Although B-52D retirement will decrease this shortfall to some extent, this gain will be more than offset by subsequent ALCM and B-1B deployment. Assuming no improvements to our existing tanker fleet, we would be more than [deleted] tankers short of our SIOP requirement alone in fiscal year 1989.

SAC's tanker fleet is a national resource which must be shared. In addition to demands for increased strategic nuclear warfighting capability, current national guidance calls for the ability to rapidly project and sustain military power in any crisis area involving our national interests. These increased demands for general purpose mobility will exacerbate the existing tanker shortfall.

In a global, multiple-theater conventional scenario, more than [deleted] tankers might be required to support general purpose deployments. Although SAC could, and would, meet these commitments, I am concerned that we would find ourselves in an untenable position if regional conflicts escalated to the level of SIOP execution. [Deleted.]

Because of the increasing demands for mobility, the existing tanker shortfalls will increase our reliance on prepositioned fuel reserves and friendly nation overflight and landing privileges. In the face of changing alliances and an unstable world environment, I consider reliance on such privileges imprudent. The most sensible approach to reducing our reliance on third country cooperation is to enhance our mobility through increased refueling provided by tanker force modernization. Reengining the KC-35s and KC-10 procurement will increase both our refueling capacity and our airlift capability.

Reengining the KC-135A with the CFM-56 engine will significantly increase carrier range and the fuel available for offload. A reengined KC-135 will be able to do the job of one and one half KC-135As. This improvement in KC-135 tanker capability will make a substantial contribution to redressing both our SIOP and general purpose shortfalls.

Current Congressional support for the KC-135 reengining program is encouraging; however, current funding levels will not support reengining of the total KC-135A force. Any level of modernization will certainly help, but we need to extend the program if we are to adequately meet our long-term demands. Despite harsh fiscal realities, the central importance of aerial refueling to our military plans requires that we reengine all KC-135As with the CFM-56 to build toward an adequate refueling capability for the 1990s.

The second program to redress the tanker shortfall is procurement of the KC-10. This aircraft will provide significantly improved fuel offload and airlift capabilities in support of general purpose deployment. Although not planned for direct SIOP support, the KC-10 will lessen the existing SIOP shortfall by relieving some KC-135s from deployment taskings. For these reasons, I fully support the current proposal to enhance our mobility capabilities by increasing the total KC-10 buy from 16 to 60 aircraft. We in SAC are working with the Military Airlift Command and Tactical Air Command to develop procedures to best meet our national mobility requirements.

CONVENTIONAL MISSIONS

As previously mentioned, current national guidance is placing increased emphasis on the need for mobility and rapid conventional power projection. In this context, SAC's strategic bomber force has a unique capability to provide conventional bombing in support of general purpose force employment.

The manned bomber can rapidly project massive firepower in support of conventional operations. With dedicated tanker support, this capability is unconstrained by range or reliance on forward basing privileges and prepositioned materials and could be utilized in any conventional scenario, at any time, anywhere in the world.

In addition to their long range conventional bombing capability, SAC bomber aircraft possess considerable potential for application in a maritime role. SAC currently has the ability to conduct aerial minelaying and sea reconnaissance and surveillance missions, but with the exception of these two roles, potential maritime applications have largely been ignored. The same capabilities that make the B-52 valuable in a SPF role could be applied to maritime operations.

Manned bombers could launch effective long-range strikes against Soviet naval shore facilities and ships at sea. In fact, SAC is currently investigating the potential use of B-52s as delivery platforms for standoff air-to-surface missiles such as the HARPOON and the Medium Range Air-to-Surface Missile (MRASM) against Soviet surface vessels. With minor modifications, crew training, and procurement of these standoff weapons, B-52 aircraft could be used to provide sea lane control from U.S. land bases. Used in this role, SAC forces could provide near-term support for the Navy in its drive to regain and maintain maritime superiority.

SPACE

As the strategic importance of space expands, the U.S. is becoming critically reliant on space systems for tactical warning functions. Our reliance on space systems is also expanding in other areas such as navigation, weather, communications, and surveillance.

While the U.S. position has been to employ space as a support medium, the Soviets clearly view it as a potential combat arena. Recognizing our dependence on space, they have taken steps to protect their own systems while degrading ours with an operational anti-satellite (ASAT) capability. Because of this Soviet threat, and our expanding reliance on space systems, we should accelerate our own ASAT development to deter the Soviets or, if deterrence fails, limit the effectiveness of their critical space support systems.

If the U.S. fails to pursue an aggressive space weapon development program, there is a very real danger that the Soviets could [deleted].

[Deleted.] We cannot afford to let that ominous possibility become reality.

Because space is the ultimate "high ground", it has unique advantages over traditional terrestrial basing for strategic attack. [deleted].

Unless the emphasis regarding operational systems is reoriented, the future prospects for coordinated and meaningful space systems development do not appear favorable. Operational requirements must begin to drive the direction of our technology efforts. We should develop doctrine, policy, and technology to insure the development of strategic space systems to complement our terrestrial-based strategic offensive forces.

[Deleted.] While I am sensitive to these sentiments, we must insure that the U.S. is not eclipsed by Soviet willingness to employ any system that serves their national interest.

If the Soviets achieve superiority in space they could well attain a decisive war-winning edge. The President's modernization program indicates we are beginning to take the steps necessary to assure our future ability to operate in and from space. This is a trend that must be maintained.

CONCLUSION

We stand at a crossroads. We can adequately maintain and modernize our forces or elect to adopt a position of inferiority. I believe the latter of these two options is unacceptable—the risk and potential costs are simply too high, Only through capable forces in fact and credible forces in perception can we hope to maintain peace and reach our ultimate goal of stability through meaningful strategic arms reductions.

In the face of painful fiscal realities, the Congress is to be commended for their initial support of the President's plan to revitalize our deterrent posture. We've taken a good first step—we must not falter now in our renewed sense of resolve and commitment.

Prepared Statement of Gen. James R. Allen, Commander in Chief, Military Airlift Command

SUBJECT: MILITARY AIRLIFT COMMAND READINESS POSTURE

Mr Chairman, Members of the Committee, I welcome this opportunity to appear before you today to discuss the ability of the Military Airlift Command (MAC) to project rapidly, support, and sustain our Nation's combat-ready forces in any area of the world where our vital national interests might be challenged.

I was strongly aware of the vital role MAC plays in the global strategy of the United States long before coming to MAC. As Deputy Commander in Chief of the United States European Command, I relied heavily on MAC's peacetime operations to maintain the readiness of my forces. In the event of a Warsaw Pact invasion of NATO Europe, we would have been more heavily dependent on airlift for rapid reinforcement and resupply. Those several years in Europe fortified my great respect for the many significant capabilities of MAC. Today I am proud to appear here as the Commander in Chief, Military Airlift Command (CINCMAC).

There is no question in my mind that our Nation's first priority must be to restore both in fact and in perception a balance of strategic nuclear power vis-a-vis the Soviet Union. Such a balance is essential to deterrence and to the credibility of our efforts to protect vital national interests throughout the world.

Concurrently, however, it is clear that the potential for Soviet adventurism increases in direct proportion to perceived Soviet military advantage. The invasion of Afghanistan, Soviet-supported (directly or indirectly) instabilities in Africa, Asia, and in Central America, along with the sometimes dangerously irresponsible behavior of Soviet client states, such as Libya, exemplify the variety and global distribution of potential challenges to the vital interests of our Nation.

It is self-evident that we cannot station forces around the world with strength sufficient to meet all potential challenges. What we can and must do is acquire the ability to project rapidly, to any point on the globe, well equipped and trained combat forces that are strong enough to discourage military adventurism. The existence of such a projection capability, by itself, could provide an important element of deterrence to military adventurism on the part of any potential foes.

To achieve this capability, the Nation must have a balance between deployment combat forces and rapid deployment capability. No matter how well equipped and trained our CONUS-based forces might be, they provide very little in the way of deterrence if we lack the manifest capability to deploy and employ them when and where needed. Today we find ourselves in an unbalanced posture in which our mobility forces are inadequate to meet the rapid deployment needs of our existing combat forces.

To correct this deficiency, we must work toward a coordinated and balanced solution that considers not only airlift, but also sealift, prepositioning, and ground transportation. Each of these elements plays an essential role in the mobility equation, while the two key factors of delivery time and volume dictate the optimum mix between the various elements.

For example, airlift can provide rapid, flexible delivery, but it is limited in terms of volume. Sealift provides volume, but it cannot deliver required cargo/forces during the early days of conflict when they are most critical. Prepositioning assists in both timing and volume, but it is essentially a single-point solution that degrades flexibility in the event that the assets might be needed in some other region. The last mode, ground transportation, is essential to link each of the other three modes into the total mobility system. Taken together, all of these are necessary to maintain the absolutely essential capability to project the right forces at the right time and in the quantity needed to fulfill our national policies and objectives.

Although my principal responsibility as CINCMAC is providing air mobility for our combat forces, I am also charged to support those forces with combat rescue and recovery, global weather, and audiovisual services. The value of combat rescue and recovery was well documented in Southeast Asia and is readily understood. The increasing need for more complete and more accurate weather data is not so widely recognized.

MAC's Air Weather Service is charged with providing weather support to the US Army as well as the US Air Force. The recent proliferation of land and air combat systems incorporating laser and infrared technologies has made weather prediction an even more critical factor in modern combat.

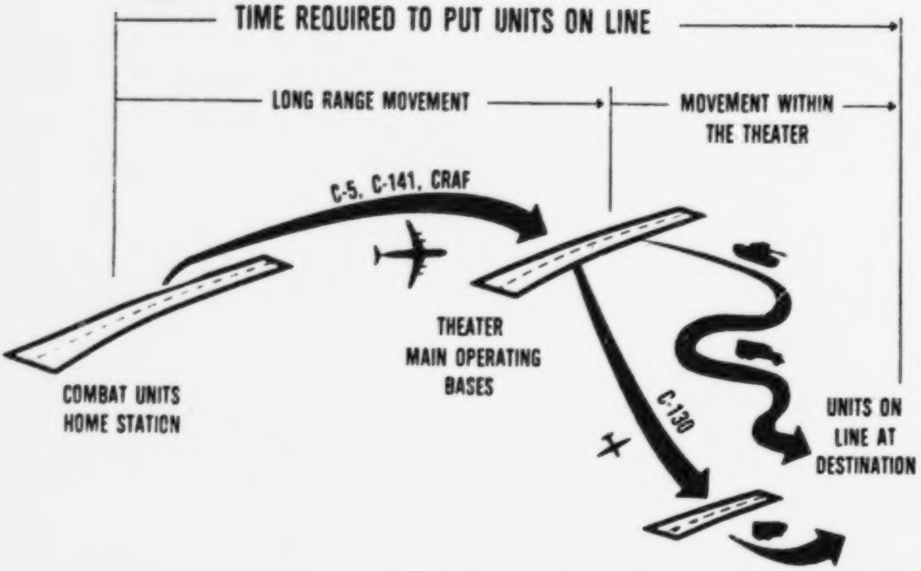
AIRLIFT

My detailed remarks will begin with a focus on airlift. Airlift has many advantages for the deployment of forces, but foremost are its flexibility and speed. Our all-jet intertheater airlift force permits an initial response force to be in place virtually anywhere in the world in a matter of hours rather than weeks. This timeliness can make the difference between establishing a defensive position with a relatively small force capable of holding back or slowing an aggressor; or later, after failing to have responded rapidly enough, having to mount a vastly larger force to regain lost ground. The speed and flexibility of airlift can also insure a continuous flow of needed resupply during the first days of the conflict. The ability to project those forces early and to keep them resupplied is critically dependent upon the resources of MAC. Once the supported commanders determine their requirements and the JCS decides on the best mode of transportation, MAC must apply existing airlift capability in the most efficient manner to meet those deployment, employment, and resupply requirements.

AIRLIFT REQUIREMENT/CAPABILITY

The need for additional airlift to meet the Nation's requirements has been clearly documented, but I want to take this opportunity to review these requirements from my perspective as Commander in Chief of the Military Airlift Command. The principal objective of our airlift force is to permit our Nation to rapidly bring to bear the forces required to successfully wage war. To that end, airlift effectiveness is measured by the responsiveness with which a required combat force can be delivered, resupplied, or repositioned within a battle area. Figure 1 illustrates the total concept of movement and shows that the constraining point can be either the long-range movement or the movement within the theater. For example, if we concentrate on the long-range portion only, then we are likely to find that we have projected significant forces in-theater but lack the ability to properly position or sustain them in combat.

FIGURE 1


TIME REQUIRED TO PUT UNITS ON LINE
LONG RANGE MOVEMENT
MOVEMENT WITHIN THE THEATER
C-5, C-141, CRAF
THEATER MAIN OPERATING BASES
COMBAT UNITS HOME STATION
C-130
UNITS ON LINE AT DESTINATION

We must maintain a balanced airlift force in order to effectively carry out our national policy. An understanding of this concept will provide additional insights into the general requirements stated in the Defense Guidance and the Congressionally Mandated Mobility Study (CMMS).

The Defense Guidance provides direction which is both qualitative and quantitative. Both aspects create a high demand on our limited airlift force. The following illustrates mobility demands contained in current defense policy.

[Deleted.]

The CMMS evaluated the forces and mobility assets required for two separate scenarios to Southwest Asia, one to NATO, and one a combination of Southwest Asia and NATO. The study clearly illustrated that airlift, sealift, and prepositioning are all needed to redress the mobility shortfall when considering deterrence, timeliness, flexibility, survivability, war-fighting capability, and cost. The required additional intertheater airlift recommended by DOD was 20 million ton-miles per day (MTM/D) of which at least 50 percent must be outsized. This was based on a 1986 baseline which included CRAF plus CRAF enhancements, assumed the C-5 wing modification and C-141 stretch programs were complete, and that objective utilization rates were fully achieved. However, the recent decision not to fund CRAF enhancement has effectively decreased that baseline capability by 5 MTM/D. Also, the CMMS recommendation is optimistic since it was determined in an unconstrained environment. The uncertainties associated with a wartime environment—i.e., denial of roads and loss of seaports or airfields because of enemy action, weather, or congestion—are difficult to quantify and, consequently, were not included in the CMMS analysis.

Figure 2 depicts the extent of our deficiency as it applies to CMMS Scenario I and assumes modified C-5s, no CRAF enhancement, and funding that allows us to obtain our objective utilization rates. By day [deleted] the day the units are required to be online to counter the threat, [deleted] would be in place. Partially mobilized, it would take [deleted] days to close all units; fully mobilized, [deleted] days.

Figure 3 shows the effect of full mobilization plus the CMMS recommended solution—20 MTM/D in addition to the study's assumed 1986 baseline. It is important to note that this includes the CRAF enhancement program which has expired. While this recommended level does not meet the total requirement, it would significantly increase our ability to project combat forces in the time required. Units would close in [deleted] days.

[Figure 3—deleted.]

In Figure 4, we see that by adding 40 KC-10As in a cargo role and 44 C-5Bs, the closure time is [deleted] days. In this study, if the KC-10s are used to air refuel the C-5s and C-141s instead of carrying cargo, the closure time is the same.

[Figure 4—deleted.]

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The Defense Guidance also provides specific tasks which the mobility forces should be able to accomplish. Figure 5 shows one of these requirements along with our current capability, 1986 airlift force with fully funded spares plus the proposed C-5/KC-10 buy, and CMMS recommended capability. It is important to note that these tablets represent only our ability to deploy forces and do not include theater movement requirements or any degradation in capability that would occur during wartime. This illustrates the inadequacy of our current airlift capability which is severely limited by the number of aircraft available, spare parts, and command and control equipment required to effectively direct the airlift flow. Additionally, of our current intertheater force of C-5, C-141, and CRAF, only the C-5 is capable of moving the outsize cargo items, many of which are key warfighting vehicles.

We must also consider other aspects of the airlift system that enable the cargo to flow, such as the forklifts and loaders required to process cargo at both ends of the flight, the pallets, nets, and, most importantly, the people to make the entire airlift system work.

[Figure 5—deleted.]

While we do have significant shortfalls in our capability to meet the requirements of a large deployment, I want you to know that we are making progress with what we have. Last June, [deleted] percent of our airlift units were either fully or substantially combat ready. Today, [deleted] percent of our airlift units, on the average, are fully or substantially combat ready. Factors influencing the increased readiness include [deleted]. There are many variables that are considered in evaluating total readiness, and these numbers should not be thought of as a precise measurement but as a generalized snapshot of capability. However, the significant improvement shown this past year is a positive factor in our overall readiness.

We have a respectable and significant airlift capability today and are fully capable of accomplishing our peacetime tasks as well as minor contingencies. We have proven this in the past by supporting a variety of contingencies and exercises. Our shortfalls surface when we are tasked for a sizable deployment of forces over a prolonged period of time.

PRIORITIES

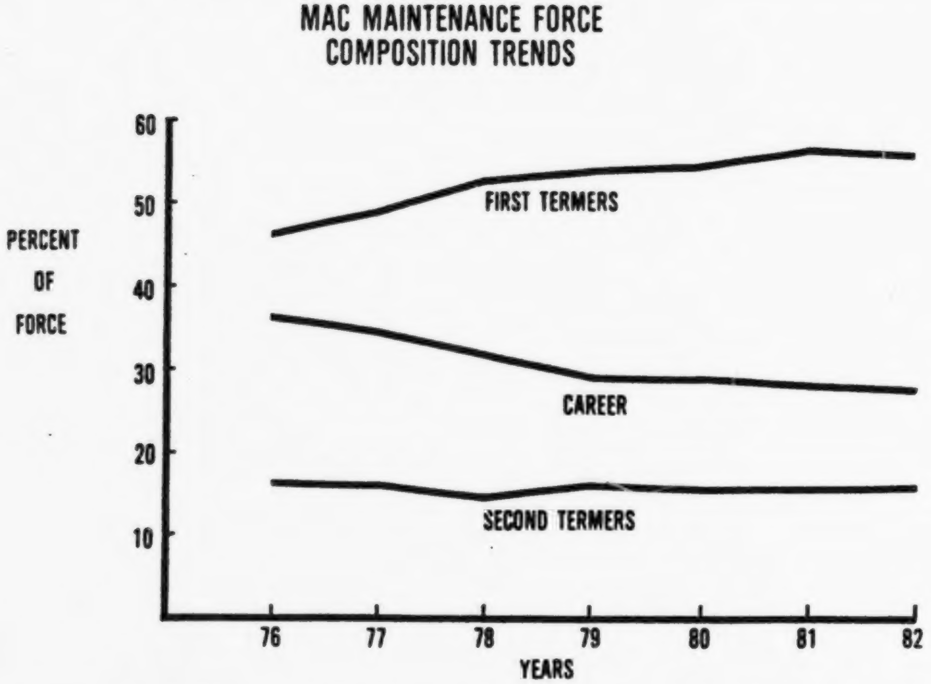
Within the Military Airlift Command, I have established three basic priorities to deal with the overall deficiency of airlift. The number one priority has to be our people; second, we must realize the full potential of those resources we have assigned; and third, we need to procure new aircraft to meet the remaining requirements.

PEOPLE

My primary concern continues to be the retention of experienced, quality people. Where necessary, we can adjust to shortfalls of equipment, but we cannot operate when there is a lack of dedicated and highly trained people. During recent travels, I have noticed a significant change for the better in the attitude of our people. Much of the credit is due to recent gains in pay and benefits, and our people appreciate your efforts on their behalf. I am optimistic that this enthusiasm will be transformed into higher retention. While the statistics for fiscal year 1981 and the beginning of fiscal year 1982 showed improvements, they must be viewed with caution. Even with improved retention, we still have problems in some critical areas.

Currently, shortages of experienced maintenance personnel are threatening our capability to meet our wartime mission. We lack approximately 1,800 midlevel noncommissioned officer supervisors, and a typical maintenance squadron has a flightline experience level of only 3.8 years. Figure 6 shows that first-termers comprise over 50 percent of our primary maintenance force and careerists only one-fourth.

FIGURE 6



To compound this problem, a high percentage of aircraft maintenance personnel in the airline industry will soon reach retirement age, and we fear that this will draw many of our experienced people into civilian employment.

This problem, as well as others, will be exacerbated even more with the procurement of new aircraft to our inventory. For example, the procurement of 50 C-5B aircraft will require the addition of over 4,000 more people comprised of crewmembers and maintenance/support personnel. Granted, these are requirements that are still down the road, but we must start planning for them now.

As stated previously, your recent efforts have resulted in enthusiasm among our people. To build on this enthusiasm and to retain the quality of people we need, there are a few more things that need to be accomplished. We must first guarantee that comparability in pay is maintained in the years ahead.

Second, we need to devote immediate attention to the out-of-pocket expenses which are burdening our members when the they move. Military members are the only government employees who do not receive adequate compensation for moves. For example, if a master sergeant and a comparable civil service employee, both with a wife and two children, were transferred from the Washington DC area to San Francisco, the total reimbursement for the civil service employee could be more than 10 times that of the master sergeant, as illustrated in Figure 7.

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FIGURE 7

MOVING COST REIMBURSEMENT COMPARISON

	MASTER SERGEANT	EQUIVALENT CIVIL SERVICE EMPLOYEE (GS-9)
MILEAGE	$ 866	$ 426
PER DIEM	450	1,425
HOUSE HUNTING TRIP	0	1,093
TEMPORARY QUARTERS	0	2,438
REAL ESTATE EXPENSES	0	12,000
MISC/DISLOCATION	277	210
TOTAL REIMBURSEMENT	$1,593	$17,592

We must provide military members realistic reimbursement of moving costs. We need funding to pay higher mileage rates for our members and their dependents. In addition, thought should be given to instituting a reimbursement program for the military which is comparable to the civil service program. Another option to be considered is instituting a guaranteed low-interest, inservice loan program. With high mortgage interest rates and frequent moves, many of our people can never hope to get into the housing market.

Third, we need to insure legislation introduced in the House last year is passed. I'm speaking of a new GI Bill and a CHAMPUS Dental Plan. The GI Bill will sustain the service with high school graduates, a must as technology increases and the pool of available young people decreases. A good dependent dental plan is merely a cost of doing businss today. Most major corporations recognize this through some form of dental coverage for their employees and families, and we must do the same.

Last, we need to give our junior people the confidence that our current retirement system, a career motivator, will remain in effect without diminished benefits.

Preparedness, and then the effective use of force, depends upon the retention and procurement of quality personnel. We can not go out and buy a mechanic, pilot, or any other skilled member with 6, 11, or 15 years of experience. Only through active involvment and properly developed programs which guarantee a decent standard of living will we be able to sustain an experienced volunteer force.

REALIZING OUR POTENTIAL

Our next priority is to realize the full potential of our existing resources. To achieve this, we must have adequate spare parts, complete the C-141 stretch and C-5 wing modification programs; continue with CRAF enhancement and C-130 modernization; improve our command and control, training, and real property maintenance facilities; and continue upgrading our support equipment. Thanks to you, giant strides have been made in these areas in recent years, and I sincerely hope that you will continue to support them.

A key step in realizing the full potential of our existing resources has been the congressional action to fund the spare parts deficit for the C-5 and C-141, which currently constrains our wartime capability. Planning guidance establishes for the C-5 and C-141 an objective utilization rate of [deleted] hours/day per aircraft for the first [deleted] days of any major contingency and [deleted] hours/day per aircraft thereafter. We consider this requirement to be our prudent risk level. Due to underfunding of C-5 and C-141 spare parts in previous years, our current wartime capability for the C-5 is [deleted] hours/day per aircraft for the first 45 days and [deleted] hours/day per aircraft thereafter. For the C-141, our current capability is [deleted] hours/day per aircraft for the first [deleted] days and [deleted] hours/day per aircraft thereafter.

I am happy to report that, thanks to the Congress, airlift spares funding for fiscal year 1982 has improved considerably over prior fiscal years. Funding for all of our strategic and tactical airlift peacetime operating stock (POS) and war readiness spares kits (WRSKs)/base-level self-sufficiency (BLSS) spares requirement has been allocated for the current fiscal year. This equates to readiness. In the area of sustainability, 57 percent of our other war reserve materiel (OWRM) has been funded this year. OWRM is the spares required to support increased flying hours until new industrial production can meet sustained combat requirements. These recent positive funding initiatives will not cure our airlift capability shortfall overnight, as many mission-essential items have production lead times in excess of 2 years. However, our utilization potential will continue to increase as additional spares reach the shelves. If present funding levels continue, we will meet our objective utilization rates by fiscal year 1985-1986.

Another program that is helping us achieve our full potential is the C-141 stretch, which lengthens the fuselage by 23 feet and adds an aerial refueling capability. Today most of the fleet has been modified, each with three extra pallet positions (roughly 30 percent more volume capacity) and each capable of inflight refueling. Program completion is expected by early summer. The program is still not only ahead of schedule and below originally projected cost, but it also has greatly increased our efficiency and flexibility. This was recently illustrated during Exercise BRIGHT STAR 82, a demonstration of the capability of the Rapid Deployment Joint Task Force (RDJTF). MAC flew over 500 missions, equating to almost 2,800 individual sorties, to airlift personnel and equipment of the RDJTF to the exercise area which included Egypt, Somalia, Sudan, and Oman. During the exercise, six C-141B aircraft departed Pope Air Force Base, North Carolina, and were air refueled twice. Over the Mediterranean, they joined with 12 more C-141Bs and 6 C-130s which had previously been positioned at European bases. The formation then proceeded to the exercise area in Egypt and arrived within 6 seconds of the preplanned drop time. They delivered by various airdrop modes 860 combat troops and 180 tons of equipment and supplies. Following the airdrop, the six C-141Bs from Pope refueled one final time before recovering in Germany. The other aircraft in the formation recovered at various European bases.

We are also preserving a unique and vital air mobility asset by correcting the wing deficiencies in the C-5A. This program to strengthen the wings on all C-5As will permit us to operate the aircraft at full capacity and obtain an additional 30,000 flying hours on each, thus permitting them to continue their vital role well into the 21st century. The first production aircraft entered the Lockheed Georgia facility last month. All 77 C-5 aircraft are scheduled to be modified by the end of fiscal year 1987. We need your continued support to insure this needed modification stays on schedule.

The Civil Reserve Air Fleet (CRAF) is an integral part of our Nation's airlift capability. The CRAF was formally established in 1952, and provides a means of combining commercial and military airlift assets to meet requirements of the Department of Defense (DOD) in an emergency. The CRAF is a very economical way to rapidly augment our forces and represents approximately 50 percent of our wartime airlift capability. In January, the decision was made to allow the most recent CRAF enhancement request for proposal (RFP) to expire; however, that decision only affected that RFP. The concept that the CRAF Enhancement Program is an extremely cost-effective method for the Air Force to acquire additional strategic cargo capability remains valid.

Another area where we need your help involves the intratheater airlift force. Success in battle depends on the capability of placing the right forces in the right places at the right time. For the past 25 years, our C-130s have provided this vital capability, and it is imperative that battle commanders have this capability in the future. Due to their extensive low-level flying and short-field landing operations, we are experiencing an excessive number of fatigue cracks in the outer wings of our C-130Bs and C-130Es. Additionally, due to its age, we are experiencing corrosion in the center wing of our C-130As. Outer wing replacement and center wing rehabilitation will be necessary if we are to maintain the capability of these aircraft. Correcting these wing problems will extend the service life of the C-130 beyond 50 years, or well into the 21st century. As we extend its service life, we must also address the ability of the intratheater airlift force to deliver the equipment, supplies, and personnel in future contingencies. C-130 capabilities have remained relatively static while the environment in which they operate continues to change dramatically. Upgrade of its navigation, communication, and aerial delivery capabilities is necessary if the C-130 is to operate and survive in tomorrow's tactical environment.

A vital element in realizing the full potential of our existing assets is improvement of our command and control (C^2) system. I am convinced that command and control can contribute to more effective use of limited assets. However, our current C^2 systems, including supporting communications, are inadequate, outmoded, and incapable of effectively supporting this concept. MAC's present C^2 system was designed in the 1950's and 1960's with heavy dependence on fixed common user communications to support the intertheater role of airlift. This system still adequately supports our peacetime day-to-day operations, but as has been repeatedly demonstrated during exercises and crises, it falls far short of meeting time-sensitive, geographically diverse requirements. MAC's designation as a specified command and the consolidation of intratheater airlift has further burdened our C^2 system. The vary nature of intratheater airlift also places unique demands on us for transportable C^2 echelons.

To resolve this inadequacy, we have instituted a program, with Air Force and DOD support, to upgrade our command and control system. We had an independent contractor look at our C^2 system's global responsibilities and capabilities and propose alternative solutions to correct our deficiencies. We have chosen a fiscally responsible solution, and an implementation plan for these solutions will be available by the end of March of this year. A large percentage of our upgrade efforts is directed toward state-of-the-art, off-the-shelf equipment for integration into appropriate C^2 echelons in the near term.

Included in the fiscal year 1983 budget is a program to alleviate a severe shortfall in the available quantity of deployable command and control equipment. We have embarked on a program called the MAC Airlift Control Element Reaction Communications (MARC). The MARC system, coupled with the AFCC Quick Reaction Package (QRP), will provide the capability to extend our command and control of the airlift force into unimproved areas where fixed communications are either nonexistent or require augmentation.

Another factor in realizing the full potential of our assets is training. Our aircrews, as well as maintenance and aerial port personnel, perform daily the same duties they will be expected to accomplish in wartime. The only difference will be the level of intensity. In order to maintain a viable airlift readiness capability, we continuously exercise the system by flying aircraft through MAC's global route structure. This provides training for our aircrews as well as our maintenance, supply, and aerial port personnel. In addition, while flying these missions, we produce a tangible by-product—airlift. MAC enhances our Nation's total readiness posture by airlifting an average of 20,000 tons of cargo each month for DOD users over established worldwide cargo channels.

To insure we maintain airlift readiness and that we have a responsive airlift force, MAC has requested a flying-hour program which will insure minimum proficiency for our crews. In our formal schools, we are combining courses of instruction and initiating new courses which should reduce the flying hours required to qualify our crewmembers. We have increased the amount of tactical events accomplished on joint airborne/air transportability training exercises with the other services to develop and maintain mutual capabilities needed in wartime. Through the increased use of new training devices such as C-5 and C-141 cockpit procedures trainers, a full-crew C-130 simulator, and an air refueling trainer, we are seeking to reduce the number of flying hours that would otherwise be necessary to train our aircrews. With your continued support, we will be able to maintain our readiness training programs at the level necessary to provide the airlift capability necessary to meet our wartime requirements.

We must maintain our real property maintenance facilities at a level which insures safety, a good working environment, and essential mission support. As MAC's facilities and utilities systems continue to age, our backlog of maintenance and repair (BMAR) has continued to grow. Despite improved funding in this area, the fiscal year 1982 BMAR has increased by $16.0 million from the previous year, and fiscal year 1983 funding is not sufficient to contain this growth rate. I consider it essential that this "bow wave" impact on the BMAR level be contained, and we need your continued support to insure sufficient funding.

We also need your continued support in providing funding for support equipment, particularly to improve our vehicle readiness posture. There has been considerable improvement in this area thanks to the recently increased level of funding provided by Congress, and we sincerely appreciate that support. However, replacement requirements continue to increase, especially with the aging materials handling equipment which is necessary for cargo onload and offload. It is essential that vehicle acquisition funding remain at the programmed level to provide a viable fleet capable of sustaining a wartime surge.

NEW AIRCRAFT

Our next priority is to procure new aircraft to meet the remaining airlift requirement. The proposed addition of 50 new C-5B aircraft will make a major contribution to the recognized CMMS ton-mile per day/outsized shortfall. These aircraft will provide nearly a 60 percent increase in outsize capability over our current capability. Although the airplane is labor-intensive in comparison to more modern designs, it is a proven system that can be integrated into the airlift system to produce 8 MTM/D of additional capability before 1990.

The Air Force intends to use the additional 44 KC-10As to satisfy mobility requirements. These aircraft will be employed as cargo carriers, as tankers in support of airlift refueling missions, or in a dual airlift/tanker role as in the deployment of tactical air squadrons.

In this last role, a single KC-10A can provide air refueling for eight F-16 aircraft over a 3,000-nautical mile range while airlifting 100,000 pounds of support cargo and personnel. This capability will allow us to more effectively deliver the tactical fighter forces necessary to provide a greater degree of air superiority at an earlier time. As a tanker in support of air refueling missions, the KC-10A will increase the flexibility and productivity of our intertheater airlift fleet by reducing reliance on en route basing and eliminating some takeoff limitations now experienced by the C-5. The KC-10A's refueling capability has the potential to increase C-5 payloads by up to 20 percent from airfields which have takeoff gross-weight restrictions. In the cargo-only role, the KC-10A will airlift significant quantities of bulk (and some oversize) cargo over long ranges and can add approximately 4.9 MTM/D of capability.

The proposed C-5B and KC-10A aircraft will provide an important and welcome addition to our overall airlift capability; however, these additional assets will not satisfy the 20 MTM/D intertheater airlift capability recommended by the CMMS. Also, the C-5Bs and KC-10As do not address or alleviate shortfalls in our intratheater capability. In my judgment, a new aircraft will be required in the latter part of this decade to provide necessary additional capability to our intertheater airlift force, to supplement intratheater airlift capability, and as an eventual replacement for the C-141s and C-130s upon which we depend so heavily.

Up to now, I have limited by discussion primarily to airlift forces, but that is only part of MAC's total mission. As I mentioned before, MAC is also responsible for combat rescue and recovery, global weather, and audiovisual services. I will now briefly address each of these.

AEROSPACE RESCUE AND RECOVERY SERVICE

The Aerospace Rescue and Recovery Service (ARRS) is the sole Department of Defense active-duty agency dedicated to combat search and rescue. To fulfill this role, the men and women of Rescue are expected to locate and recover downed aircrew members from enemy territory. In addition to this primary mission, ARRS provides air support for special operations forces; supports our intercontinental ballistic missile force, the Space Shuttle, our overseas commanders, and the National Hurricane Center by locating and tracking the position of hurricanes and typhoons; and manages the worldwide collection of particulate and whole air atmospheric samples. As a result of this many faceted capability, 470 military and civilian lives were saved by these dedicated professionals during 1981.

But today, Aerospace Rescue and Recovery Service cannot meet the many demands placed on it—especially in the primary mission area of combat rescue. The current Air Force Mission Area Analysis shows that ARRS is unable to meet all projected combat requirements. We cannot generate sufficient, effective combat rescue sorties because present aircraft are neither capable enough nor plentiful enough. Some of the few aircraft available are rapidly approaching the point where age makes them uneconomical to maintain. Furthermore, those aircraft were not designed for the high intensity combat environment which will characterize a major war in the future.

The Congress has provided funds to purchase 11 UH-60A Sikorsky Black Hawk helicopters which we will receive within the next 12 months. These highly survivable aircraft will help offset the shortage of combat rescue aircraft in the near term, and we sincerely appreciate the support you have given us. However, the UH-60A is not designed for night and adverse weather combat rescue operations—a critically important capability.

To meet the requirement, we need your support in the development and acquisition of a new version of this excellent basic aircraft specifically modified for the combat rescue mission—the HH-60D. State-of-the-art avionics systems for the night and adverse weather flying will permit recovery of critically needed aircrew members around the clock, and the basic reliability and maintainability of this proven helicopter will generate the large numbers of rescue sorties which could be required.

AIR WEATHER SERVICE

The Air Weather Service (AWS) is responsible for providing environmental support to the Air Force, the US Army, designated unified and specified commands, and other agencies as directed. During peacetime, AWS support is essential for protection of military personnel and equipment from severe weather, for safe and efficient air and ground operations, for realistic and productive training exercises, and for research and development of effective weapon systems. During contingencies and wartime, weather service is a vital part of the decision process in the deployment, employment, and redeployment of air and ground forces.

Your response to our funding needs in the fiscal year 1982 budget supported continuation of our effort to maintain the readiness posture of our weather support forces. Weather sensing systems, equipment for receiving and processing satellite data, communications trunks to overseas weather centers, and overseas weather intercept sites are all being upgraded.

In my assessment, the AWS capability to support Air Force and Army combat forces is inhibited by shortfalls in the ability to collect data (particularly in enemy-controlled areas); process these data; distribute products with required timeliness, accuracy, and reliability; and protect scarce combat resources from damage due to severe weather.

Our weather support force is using mostly 1950's technology; meanwhile, weapon systems have become more sophisticated and weather sensitivities that limit effectiveness are more prevalent. Another problem area is the Defense Meteorological Satellite Program (DMSP). [Deleted.]

Needed upgrades of Air Weather Service operational systems were initiated in recent budget years and are continued in the fiscal year 1983 budget request. These ongoing, critically important acquisition programs include: an automated weather distribution system; a battlefield weather observing and forecasting system; and a state-of-the-art severe weather detection radar system. Also in fiscal year 1983, continued congressional funding support is needed for the DMSP. This program provides the only assured means of obtaining critical weather data from enemy-held areas, worldwide, during contingency and wartime operations. Requested fiscal year 1983 DMSP funding provides for multiyear procurement to help insure a fully operational DMSP capability in the mid and late 1980's. Discontinuation of this capability would result in a major operational impact on the combat effectiveness of US military forces.

In summary, Air Weather Service needs an improved weather support capability in order to achieve a responsive readiness posture. Full funding of AWS initiatives for new sensors, automation, weather radar, and a viable weather satellite capability will give AWS the necessary tools to enable the Air Force and Army to deter aggression or, if need be, fight and win.

AEROSPACE AUDIOVISUAL SERVICE

The mission of the Aeorspace Audiovisual Service (AAVS) is to support war and peacetime requirements of the Air Force and other DOD agencies. This support includes audiovisual documentation of combat, exercises and contingencies, technical photography of weapons testing, readiness training for aircrews and maintenance personnel, base-level graphics, and photo/film library support. Motion picture has served as well as our primary documentation medium, but the equipment and photo labs are costly to maintain and are reaching obsolescence.

We believe that recent technological advancements in video make this medium the most practical for future requirements. Procurement of lightweight, portable television equipment, recorders, and processing equipment to support a video documentation capability will allow AAVS to meet requirements for documentation in a wartime/contingency situation.

CONCLUSION

The challenges facing our Nation today have never been greater. As America moves forward into the 1980's and beyond, the Military Airlift Command is dedicated to the support of our vital interests through airlift and other supporting services. Today we have a significant capability; however, as I have indicated, we have many areas which need attention—the most pressing of which is airlift.

Your Congressionally Mandated Mobility study clearly indicates this Nation's critical shortfall in airlift capability. The proposed acquisition of C-5B and KC-10A aircraft will satisfy approximately one-half of the added capability recommended by the study. This is a positive step in the right direction; however, it does not solve the entire intertheater problem and does not address the existing shortfalls in intratheater airlift. In fact, the added cargo volume generated by the C-5B and KC-10A will place an even greater burden on our primary intratheater airlift aircraft—the aging C-130. As a result, the intratheater airlift deficiencies that currently exist will become more acute and potentially a major limiting factor in a protracted contingency. To address both the intertheater and intratheater shortfalls, we will need a new aircraft in the late 1980's.

As we work together to fill our Nation's mobility needs, the importance of responsive airlift cannot be exaggerated. The chronic, well-documented airlift shortfall is a matter of serious concern. Simply stated, the ability to project our forces rapidly in order to reinforce the overseas theaters in a time of crisis or confrontation is a vital element of deterrence. Accordingly, we request your support of the C-5A wing modification, the C-5B, and the KC-10A. For purposes of deterrence, our Nation needs a manifest capability to project military power rapidly to any area of the world where America's vital interests may be challenged. If the challenge does occur, we must have the ability to confront it.

PREPARED STATEMENT OF GEN. W. L. CREECH, COMMANDER, TACTICAL AIR COMMAND

TACTICAL AIR COMMAND READINESS POSTURE

I appreciate the opportunity to address the important issues and challenges facing Tactical Air Command and the Tactical Air Forces. The continuing massive Soviet build-up and overall flow of events in an increasingly troubled and interdependent world are forceful reminders of the need to reverse the decline in our military posture that we suffered in the 1970's. The recent steps taken to improve our overall readiness have been most welcome and very much needed—but much more needs to be done.

PART I—PERSONNEL ISSUES

Readiness begins with people. Last year I talked about the attitudes of military people changing to a sense of rising but cautious optimism coincident with the more equitable compensation steps implemented in 1980 and 1981. However, we are not yet completely out of the woods in terms of retention or career orientation, and now is not the time to turn back the clock. I hear, from some in the Congress, the faint rumblings of advocacy of a military pay cap in 1982. I can think of nothing more damaging to the readiness of our forces than a return to the ruinous compensation policies of the last half decade. Pay caps, although attractive to some in the short run, are demonstrably a form of false economy. It clearly is more expensive to continually train replacement manpower than it is to pay a fair salary that will retain the needed number of skilled personnel. In that regard, I strongly encourage you to pass a pay raise for Oct 82 that at least keeps pace with inflation. I am confident that if we will take a more equitable and more stable approach to compensation in the 80's, we can attract and maintain the quality of people that we need to man today's demanding weapons systems. We simply cannot afford to get back on the see-saw of pay raise/pay cap. We already know what that produces.

I also solicit your favorable attention to the proposals for Dental CHAMPUS and for Per Diem equity between enlisted and officer personnel. As you know, Per Diem equity was established last year under the Uniformed Services Pay Act of 1981, but the required funding subsequently was withdrawn. That on-again, off-again approach has had an extremely negative morale impact, and Per Diem equity stands on its own merit as a pay step that is long overdue.

PART II—FORCE STRUCTURE

Turning to our equipment and support needs, let me start with a few words on total force structure requirements. For some years, the Air Force has had a program goal of forty tactical fighter wings including twenty-six in the active force and fourteen in the Reserves (AFRES and ANG). At one time, that forty-wing goal was to be achieved by 1982. However, throughout the latter half of the 70's, the tactical equipage programs were stretched out, and today we have a total of only 35 wings (23.5 Active; 11.5 Reserves)—for a total of five wings short. We need to keep moving toward that goal. Moreover, if we are to face up to the Soviet threat, in fact as well as fancy, we must go beyond 40 wings—with a force structure increase in the late 1980's of at last four additional tactical fighter wings. The Secretary of Defense has supported these force goals in his fiscal year 1983 Annual Report to the Congress. Such force growth must, of course, be coupled with qualitative modernization of our weapons systems, including those with which we equip the Air Force Reserve and Air National Guard.

Recent aircraft procurement decisions by the Congress call not only those force levels into question, but indeed seriously jeopardize sustainment of the forces we have today. By way of illustration, we need to purchase at last 280 fighters a year just to sustain our tactical and strategic air defense fighter structure. Growth requires more. In fiscal year 1981, we bought 288 fighters. However, in 1982 we are purchasing only 176—a level reached when the Congress further cut a fiscally restrained DOD fiscal year 1982 request of 222 Air Force fighters. Not only was the buy cut to 176—over 100 below what we need for force sustainment—but Congress supported fiscal year 1983 long-lead for only 170 USAF fighter aircraft (120 F-16's; 30 F-15's; 20 A-10's). The DOD budget for Fiscal Year 1983 asks for 182 fighter aircraft. I solicit the strongest possible support for that procurement level as a minimum. Our problems in force sustainment are compounded by block obsolesence of the F-106 (10 squadrons)—average age over 22 years—and block aging of the just under 1400 F'4's in our present fleet. As you know, the bulk of the F-4 force was bought during the five year period between fiscal year 1964 and fiscal year 1969 and the median F-4 age is now 15 years. With an expected F-4 lifespan of some 21 years, it is clear that we face a major fact-of-life replacement requirement in the near term. Therefore, procurement deferrals at this time simply exacerbate the problems we will face in 1985 and beyond. For all these reasons, I strongly encourage this committee to hold firm on the fighter procurement rates in this budget and in the future consider ways to increase the quantity of fighter buys. A failure to do so inevitably will result in a cutback in our present force structure as opposed to the force increase we so badly need. In this same context, it is useful to recall that the Soviets currently are building [deleted] new generation fighters annually ([deleted] go to FMS). These include quantity production of the MiG 23/27 Flogger, the SU-24 Fencer (F-111 Class), and the MiG 25 Foxbat; all with impressive performance features and increasingly first-rate munitions and delivery systems. They are also developing three new fighters. As you know, we have none in development. In that regard, we must start soon on the initial development of a new fighter for the 1990's (the ATF program element in our R&D budget). For the interim, we propose to make modest improvements to our current production fighters in order to stay abreast of the evolving threat during the late 1980's and early 1990's. We have proposals before the Congress to do precisely that. I will be happy to elaborate if you wish.

The Tactical Air Forces (TAF) have a number of other important programs needed to meet a growing and increasingly sophisticated threat. I will not cover all, but would like to single out a few for special mention. The first of these is the Precision Location Strike System (PLSS). As you know, a key element in allowing us to carry out the missions of close air support, interdiction and air superiority, is our ability to suppress the extensive and layered enemy threat radars and surface-to-air missiles (SAM's)—and PLSS is critical to those defense suppression efforts. PLSS provides a precise location on each enemy ground threat emitter through electronic intercept by high flying TR-1 aircraft, and allows us to keep track of these highly mobile threats in real time. Knowing their position is fundamental to development of the strategy and the tactics for countering and defeating them. Since it is not possible to kill every SAM and every MiG GCI radar on the first day of the war, we must kill some, disrupt others and avoid the rest. Thus, PLSS provides the "eyes" for us to pick our spots, to cue the Wild Weasels and jamming systems, and to provide overall coherence to the effective utilization of the defense suppression assets. The PLSS system also has the capability to provide for precision guidance of standoff munitions against the threat emitters. In a phrase, PLSS is to enemy ground radars and SAM's as AWACS is to enemy aircraft. Thus, it not only is critically important, but also acts as a force multiplier for our side. We simply cannot allow the enemy's extensive and lethal threat radar network to emit with impunity. For these and related reasons, I urge you to fully fund our PLSS request in the fiscal year 1983 budget.

As you know, we are taking steps to provide some of our F-16's and A-10's with a long overdue night capability with the LANTIRN program. LANTIRN will provide an around-the-clock capability that will be especially important, inter alia, for the following reasons:

(1) Expands the twenty-four hour operating envelope to allow for higher sortie rates—and more firepower against enemy forces with a given number of aircraft. this leverages our force structure investment.

(2) Soviet and Warsaw Pact ground forces are equipped and trained to operate at night—and NATO ground forces will be desperately dependent upon air support then just as in the daytime.

(3) Denies the adversary the sanctuary and advantages of operating in darkness.

(4) Provides a sanctuary for our own air operations—for example by rendering irrelevant his large quantity of interceptors without look-down, shoot-down capability and his optically aimed SAM's.

(5) Exploits our technological edge in such systems as an offset to quantity on the other side. We need LANTIRN, and we need it badly. We simply cannot give the opponent absolute freedom to move his massive forces as he chooses during nighttime hours.

A few words on the theatre nuclear forces. The Soviets continue to enjoy at least a 2 to 1 advantage in all relevant measures of merit in theatre nuclear capability. The forthcoming deployment of the Ground Launched Cruise Missile (GLCM) in late 1983 will help alleviate this imbalance and the GLCM system deserves your strongest support.

AMRAAM is one of the TAF's most important weapons development programs and provides a significantly improved all environment radar missile. It will have a launch and leave capability, higher velocity than previous missiles, multiple target engagement capability, good ECCM, improved fuzing, greater warhead lethality and look-down, shoot-down capability. The AMRAAM will provide the F-16 with all-environment radar missile capability it lacks today, and also will upgrade the warfighting capabilities of the F-15.

PART III—SUPPORT ISSUES

The increased spares funding received in fiscal year 1982 will, in due time, greatly improve our combat readiness and sustainability posture. Due to the lead times involved, however, our current aircraft-out-for-parts rates have not as yet significantly improved. On a given day in TAC alone, we still have the equivalent of three and one half wings grounded for lack of parts. We also have an average of 60 aircraft which have not flown in excess of 21 days for the same reason. However, it is gratifying to know that we have bottomed out and are on a road to recovery. I ask your continued support for our spares request in the fiscal year 1983 budget. As you well know, it is folly to put money on spares one year and then go back to old habits the next—all the while expecting the spares problem to go away. It is also useful to keep in mind that the spares we requested in fiscal year 1982 and are requesting in fiscal year 1983 are based upon a very modest wartime sortie rate. For example, the 30-day War Readiness Spares Kit (WRSK) for an F-4 squadron provides for an average rate of only [deleted] sorties per aircraft per day. The actual wartime surge capability of the F-4 aircraft, as demonstrated in countless exercises, is well over [deleted] that. The story is similar for our other systems such as the F-15 and A-10. Moreover, the wartime needs of our theatre commanders suggest sustained rates well in excess of a [deleted] per day level. Accordingly, a step up in sortie capability is contemplated in our out year requests. My point here is that our fiscal year 1983 spare parts request is a balanced one, the peacetime and wartime rates are flyable, and the wartime capability they represent is sorely needed. Additionally, I would like to point out as I did last year the basic folly of being cheap at the margins when it comes to parts—given the necessarily heavy investment in end item hardware and skilled manpower to operate it. For example, the typical F-15 squadron represents an investment of over $575M for equipment alone—not to mention the cost of training and maintaining squadron personnel. Balanced against this half billion dollar investment, we can fix the current spares shortfall for about $8M per squadron. That represents only 1.4 percent of the total investment but without it, the combat potential of that F-15 squadron remains merely that—unrealized potential. Thus, timely provisions of adequate spares will powerfully leverage investments already made—and therefore deserves first place in getting on with the business of building up our military capability. Your strong past support for aircraft spares is most appreciated, and that important readiness area deserves your continued attention and support. At the same time, and for the same general set of reasons, we need adequate O&M funding to provide the required support and training.

PART IV—AIRCREW QUALITY

Aircrew quality remains the cornerstone of our combat capability. They are a critical part—indeed one might say the most critical part—of the overall weapon system make-up. We have quality aircrews who are receiving increasingly demanding and realistic training. However, we have shortfalls in the flying hours needed to provide the required aircrew combat proficiency—especially that needed to confront numerically superior enemy forces. We know that quality aircrews and quality equipment can offest larger numbers. We proved it in Korea and, more recently, the Israelis have successfully used this very formula again and again—and have proven its military worth. This, therefore, is also an area where a relatively small addition of funds can provide great leverage on previous investments. Once again, it makes no sense to invest heavily in expensive airplanes and support—then economize on the margins and fall well short of the training the aircrew needs to have that required edge in performance. We have been guilty of that in the past and the recent strong support of this committee for increased flying hours already is paying dividends. We need modest further increases to get the aircrew training levels up from the disastrously low levels they had reached in the late 1970's.

PART V—QUALITY/QUANTITY

It is appropriate that I briefly address the quality/quantity issue again as there are some who continue to assert that the increase in sophistication of our systems has in fact decreased readiness—and that we need to opt for a simple, quantitative approach. I am thoroughly convinced they are wrong; and, as I testified last year, we have the data to prove them wrong. We do have a balanced procurement strategy, and our systems are very reliable when given the necessary support. Moreover, we are extremely conscious of the need to economize wherever we can since budget limitations are a fact-of-life for all of us. On the other hand, these issues cannot be decided in the abstract. We must base our procurement strategy on the warfighting capability we need to counter a massive threat that is growing qualitatively in leaps and bounds as well as quantitatively.

I dwell on this subject because I think it would be a blunder of the most serious proportions to try to change, as some would have it, to a fundamental strategy of cheap, quantitative systems. First, it simply won't work. The other side's head start, their geographical advantages, our own basing limitations and the like would bankrupt the idea even if it were generally correct—and it is not. Our best hope of overcoming our force size disadvantages continues to reside largely in qualitative, reliable equipment flown at high rates, delivering precision firepower to achieve the edge in lethality, and manned by the best trained fighter aircrews in the world. This does not mean, however, that we should in any way "goldplate" our systems; and "affordability" should continue to occupy a preeminent place in all our deliberations. But neither can one let stand unchallenged the oft heard view that our systems are too complex, too sophisticated, too unreliable to do the job they are meant to do in wartime. There is nothing basically wrong with our blueprint. The problem has been the funding to carry it out.

PART VI—SUMMARY

In summary, I appreciate the opportunity to make a combat readiness statement to this distinguished committee. I am convinced we are building the right kinds of forces to meet the threats we may face. We need to buy greater numbers of fighters to sustain and grow those forces. Our people must receive equitable pay and we must restore and maintain their confidence in the compensation process itself. Our aircrews must be of top-notch quality to overcome enemy numbers—and they need additional flying hours. We need strong support of our peacetime and wartime spare parts needs, and we must have adequate operating funds. These we need in order to protect and leverage our enormous capital investments in equipment and people.

I would also like to invite the committee's attention to the statements for the record that have been submitted by the two overseas Tactical Air Force commanders, General Charles A. Gabriel, CINCUSAFE and Lieutenant General Arnold W. Braswell, CINCPACAF, as well as Lieutenant General Lynwood E. Clark, Commander, Alaskan Air Command. Their statements further round out the world-wide perspective of tactical air force challenges and requirements.

Senator HUMPHREY. In the area of warheads, the argument is always used, why do we spend and why do we need this large budget. We have the ability to knock out the Soviet Union several times over. Do we need all of the warheads that are under your control?

General DAVIS. Yes, sir. We need all the warheads in the Triad, and need to modernize those warheads and the delivery systems.

If one is shooting at an undefended place and not getting shot back at then, that argument makes sense.

Senator HUMPHREY. Let me approach it this way: Certainly there is no doubt we need to modernize the Triad, we need to modernize the delivery vehicles, particularly; but do we possess warheads in excess of our ability to deliver them to begin with?

One gets the impression we have warheads stockpiled coast to coast and then you read about plans to build more.

General DAVIS. The majority of our strategic nuclear stockpile was built under a strategy called Mutual Assured Destruction. This strategy required large weapons in the main because accuracies weren't all that they should be.

With more accurate weapons to counter the threat, one can reduce the yield because they are selective and more accurate and they get the so-called superhard targets.

If one looks at the significant growth of the Russian inventory, which is a threat, and compares U.S./Soviet—and equivalent megatonnage, we are certainly behind there.

If one looks then at delivery vehicles, accuracies and the Soviets ability to attack us, and then what we have to deter that attack we don't ever want to use those nuclear weapons—then until we can modernize our forces, we must keep what we have to continue our deterrent posture.

Senator HUMPHREY. I am not arguing about the numbers of delivery vehicles. What I am questioning you about is the number of warheads. Do we have more warheads than we have vehicles with which to deliver them?

General DAVIS. In the strategic area, categorically no. When one looks at a protracted nuclear war scenario, your reloadable systems are your bombers and your submarines. You must be able to reload them.

Senator HUMPHREY. Are we planning to [deleted].

General DAVIS. Certainly.

Senator HUMPHREY. We are?

General DAVIS. Certainly.

Senator HUMPHREY. [Deleted.]

General DAVIS. [Deleted.]

Senator HUMPHREY. Let us go again to that new Soviet bomber: does it have a name yet? What are we calling it?

General **Davis**. [Deleted.] It is larger than the B-1. From what we know of it at this level—and, as you know, there are other clearance levels—it is larger, will have significant capability to deliver nuclear weapons. [Deleted.]

Beyond that, there is not much we know about it.

Senator **Humphrey**. Is that a growth version of the Backfire or is it completely different?

General **Davis**. It is completely different.

Senator **Humphrey**. You have raised some good points in your statement about the potential role of heavy bombers in the naval sphere. Apparently that has not received much attention?

General **Davis**. Well, sir, it has always been a collateral mission. Even today, we fly ocean surveillance missions with some regularity. [Deleted.] Our presence is there.

There is money in the research and development budget to do some work with a standoff munition to promote the antishipping role.

Senator **Humphrey**. Do we not have munitions that would serve that purpose already?

General **Davis**. Harpoon might, but we have not done the necessary research and development on it. We will be doing that on the MRASM, medium range air-to-surface missile.

Senator **Humphrey**. How does the B-1 stack up with the B-52 vis-a-vis a potential maritime role?

General **Davis**. It will have the same capability.

Senator **Humphrey**. The same?

General **Davis**. Yes, sir.

Senator **Humphrey**. You state that the radar cross-section of the B-1B is one-tenth of that of the initial B-1. It is remarkable. Is that strictly an ECM improvement?

General **Davis**. No. It has to do with using lower observable techniques on the B-1.

Senator **Humphrey**. Are those techniques entirely represented in this change?

General **Davis**. Yes, sir.

Senator **Humphrey**. Is any attention or consideration being given to the review of basing modes for the MX to this strip alert concept?

General **Davis**. That is one of the three.

Senator **Humphrey**. I don't mean big bird nor do I mean the extended cruise. What is the name for that?

General **Davis**. Continuous patrol aircraft.

Senator **Humphrey**. I mean the strip alert where you have a C-5-type airplane that moves around from time to time; any consideration to that?

General **Davis**. No. It has been looked at in the past and rejected as having the same sort of deficiencies. Each leg of the Triad has certain deficiencies. The purpose of the Triad is to take advantage of each leg, to minimize Soviet technological breakthroughs in a particular area.

Senator **Humphrey**. I understand.

General **Davis**. However, one concept we are looking at that holds great promise is the defended deceptive basing concept, which uses the antiballistic missile in conjunction with deceptive basing.

Senator HUMPHREY. What is connectivity among bombers? Is it communication with one another, or what?

General DAVIS. It is the ability to receive National Command Authorities messages from ground sites, from command posts, or any of several ways. It has to do with getting the execution message.

Senator HUMPHREY. According to your statement, we are going to be [deleted] tankers short of our SIOP requirement [deleted]. Does that projection assume the reengining?

General DAVIS. Reengining of only 300. We need to reengine all the tankers.

Senator HUMPHREY. That projection——

General DAVIS. Is with the current program.

Senator HUMPHREY. What about the JT-3D, is that factored in there at all?

General DAVIS. No, sir. The CFM 56 gives us our best——

Senator HUMPHREY. I understand. You don't have to argue with me on that point, but it looks like we are going to get some JT-3Ds?

General DAVIS. Yes, sir. We have gotten 18 and we have configured not tankers but special-purpose 135's, reconnaissance aircraft, command-and-support aircraft—28 additional are in the 1982 budget and they will go to three Guard units, one in Salt Lake, one in Phoenix and one in Knoxville.

Senator HUMPHREY. You have already made that decision?

General DAVIS. Yes, sir.

Senator HUMPHREY. Those are KC's?

General DAVIS. KC-135 tankers. The Guard lobby was at work.

Senator HUMPHREY. I can't say I approve of the assignment, but that is your business.

Where are we in ASAT now, what is our commitment on that program?

General CREECH. We have the ASAT missile under development. We are shooting for a [deleted] IOC. It may slip some. We are pushing it along as rapidly as prudence allows.

As you know, we intend to put a missile on the F-15, the F-15 squadron on either coast, at Langley AFB, Virginia, and McChord in Washington State. They will also help in regular air defense.

Senator HUMPHREY. Launching these missiles from aircraft seems like an interim approach. Is that an optimum launch technique?

General CREECH. It is the best way to do it, the most cost effective way to do it.

Senator HUMPHREY. Is that part of the idea off the shelf, and is that why we are launching them from aircraft?

General CREECH. That is part of it. When you study the dynamics of destroying enemy satellites in near-Earth orbit, that is a very cost effective way to do it; that is the best way to do it. It costs less money and so forth because you already have that force structure there to support strategic air defense.

Now, if you are going to reach out and get the satellites that are out in further orbit, a long, long way away, obviously one has to go to large boosters and a ground-based system.

Senator HUMPHREY. How is the Soviet ASAT system launched?

General CREECH. [Deleted]. The Soviet system, by the way, is a lot further along than ours.

Senator HUMPHREY. Is it operational?

General CREECH. Essentially; it has a great deal more capability than the one we are planning, so we need to keep moving as swiftly as we can. I think we also need to do the R. & D. as you suggest, on follow-on ASAT technology.

Senator HUMPHREY. There is no follow-on program as yet?

General CREECH. [Deleted].

Senator HUMPHREY. What are the shortcomings of our present system?

General CREECH. Of course, today we have zero capability.

Senator HUMPHREY. What will be the shortcomings?

General CREECH. Essentially, range, the number of satellites that one can take under attack.

Senator HUMPHREY. What about quickness of response, is that a critical requirement? Obviously, when you have to hang it on an airplane, it is not a very fast response.

General CREECH. It is not a big player. When you get into it and make a decision to shoot down one satellite or three satellites, or four, or just go up and try to kill them in multiples, the timeframe you are talking about is hours, not days, to expend all the ASAT missiles you intend to put into the inventory. It is not a big player; it is not the kind of warfare where you think in terms of a 5-minute alert.

If you just decide to shoot one of those satellites down, you could shoot it down in a matter of hours. It depends on when it comes over the United States so it is in the attack window.

Senator HUMPHREY. Your 30-day WRSK provides only [deleted] sorties per day. What are we counting on, for instance, in the European Theater in the way of sorties?

General CREECH. It is the same. The point I was making in the statement, if I may, sir, as you know, we have a parts shortfall in our WRSK's. It varies a bit in our systems. We have between 33 percent and about 50 percent fill. We have half as much sustainability as we need.

The point I was making in the statement is that even when we get all the funds we need to buy all the spare parts to get the sustainability required, it is a very modest goal in terms of sortie rate, so if there are those who want to cut back on spares it is useful to remind them we have modest aspirations to begin with, and that is characterized by that [deleted] sortie per day when, if fact, the F-4 can fly over [deleted] that and has demonstrated that it can, and the wartime need is more than [deleted] that.

So, we believe that all the spares that we have asked for in the budget should be supported.

Senator HUMPHREY. As I said earlier, I would like to examine what you give as leverage involved in adequately provisioning the F-15. Can we get that section declassified? It begins on page 8.

General CREECH. It is unclassified.

Senator HUMPHREY. It is stamped "Secret" on mine.

General **Creech**. The whole thing is stamped secret. Let me double check. We will get an unclassified version to you. We can give you an unclassified version.

[The information follows:]

Aircraft Support Issues

PART III—SUPPORT ISSUES

The increased spares funding received in fiscal year 1982 will, in due time, greatly improve our combat readiness and sustainability posture. Due to the lead times involved, however, our current aircraft-out-for-parts rates have not as yet significantly improved. On a given day in TAC alone, we still have the equivalent of three and one half wings grounded for lack of parts. We also have an average of 60 aircraft which have not flown in excess of 21 days for the same reason. However, it is gratifying to know that we have bottomed out and are on a road to recovery. I ask your continued support for our spares request in the fiscal year 1983 budget. As you well know, it is folly to put money on spares one year and then go back to old habits the next—all the while expecting the spares problem to go away. It is also useful to keep in mind that the spares we requested in fiscal year 1982 and are requesting in fiscal year 1983 are based upon a very modest wartime sortie rate. For example, the 30-day War Readiness Spares Kit (WRSK) for an F-4 squadron provides for a very modest number of sorties per aircraft per day. The actual wartime surge capability of the F-4 aircraft, as demonstrated in countless exercises, is well over twice that. The story is similar for our other systems such as the F-15 and A-10. Moreover, the wartime needs of our theatre commanders suggest sustained rates well in excess of the sortie levels the WRSKs are currently designed to provide. Accordingly, a step up in sortie capability is contemplated in our out year requests. My point here is that our fiscal year 1983 spare parts request is a balanced one, the peacetime and wartime rates are flyable, and the wartime capability they represent is sorely needed. Additionally, I would like to point out as I did last year the basic folly of being cheap at the margins when it comes to parts—given the necessarily heavy investment in end item hardward and skilled manpower to operate it. For example, the typical F-15 squadron represents an investment of over $575M for equipment alone—not to mention the cost of training and maintaining squadron personnel. Balanced against this half billion dollar investment, we can fix the current spares shortfall for about $8M per squadron. That represents only 1.4 percent of the total investment but without it, the combat potential of that F-15 squadron remains merely that—unrealized potential. Thus, timely provisions of adequate spares will powerfully leverage investments already made—and therefore deserves first place in getting on with the business of building up our military capability. Your strong past support for aircraft spares is most appreciated, and that important readiness area deserves your continued attention and support. At the same time, and for the same general set of reasons, we need adequate O&M funding to provide the required support and training.

Senator **Humphrey**. That is a good argument, I think.

General **Creech**. The [deleted] is classified. Most everything else on there is not classified.

Senator **Humphrey**. General Allen, on page 20 of your testimony you note that the utilization rate, the objective utilization rate for C-5 and C-141 is [deleted]. That is far short of the objective.

Given the already critical shortfall in airlift capability, not to mention sealift capability and lack of filled POMCUS sets and things like that, we are playing around on the margins pretty dangerously today, and in light of that, what are your thoughts on this shortfall in airlift? In other words, because we are playing around the margin and past the margins, I think we are more than ever dependent on airlift, yet we are falling short of an objective utilization rate.

What are your thoughts?

General **Allen**. My basic thoughts are gratitude toward the administration and the Congress in the 1981 supplemental and 1982 amendment, and the programed buy in 1983 which will rectify that problem.

The $160.2 million in fiscal year 1981, as I mentioned earlier, went primarily for engine spares. Then in 1982, $66.1 million for the C-5, $70.4 million for the C-141, and $23.9 million for spares for the C-130, a total of about $160 million both of those years.

Our request this year is for $47.9 million for those three airplanes and then in 1984 it will be about $45 million for the C-141 and the C-130. That will get us by the 1985 and 1986 time period up to where we can actually implement the full objective utilization rate of [deleted].

Again, as I said earlier, we are just leadtime away.

Senator **Humphrey**. Gentlemen, is there anything you want to add before we close?

General **Allen**. I would like to add one thing, if I might, Senator, concerning the Aerospace Rescue and Recovery Service which is also part of the Military Airlift Command, a very proud service, and a very important service. They registered their 20,000th saving of a human life last fall. Unfortunately, the Rescue and Recovery Service is somewhat analagous to your automobile insurance policy; you don't pay much attention until you have an accident, then you get it out and you read the fine print and you wish you had more coverage.

Our capabilities in the Rescue and Recovery Service today are well below any possible level of prudent risk. We need to do more.

Now, we have the authority to procure 11 UH-60 helicopters, the Army version, and we will be going out with a request for proposal for avionics subsystems and other equipment to upgrade additional UH-60 helicopters, making the HH-60D an all-night version for the Rescue and Recovery Service that is so urgently needed.

I urge the support of this committee and the entire Congress on that effort. When we need that Rescue and Recovery Service in the event of a contingency situation, we will be in the same situation that you would be in with that insurance policy. It is too late to raise the coverage at that point.

Senator **Humphrey**. Very well.

Thank you for your time and your testimony. The record will remain open for 15 days. We would like to submit a number of questions to you that there wasn't time to ask, and we request you reply to them within that time period.

[The questions, with answers supplied, follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

FMS AFFECT READINESS OF U.S. FORCES

Question: General Creech, according to the 1982 Material Readiness Report, "Foreign military sales of F-16s to Egypt, Pakistan and Venezuela without sufficient leadtimes to produce logistics support elements will further deplete USAF stocks in fiscal year 1982-83, exacerbating the spare parts shortages and driving mission capable rates downward."

Do you agree with this statement, that foreign military sales of F-16s have temporarily degraded the readiness posture of our own F-16 force?

Answer: No—as we stated in the required Congressional notification for all three programs no adverse impact to USAF readiness has been caused by these programs. The contractor has financed procedures to shorten leadtime and minimize diversion of spare assets from USAF inventory. F-16 support shortfalls have been a function of underfunding spares/support lines in the fiscal year 1979/80 budgets. With full funding of the F-16 spares support lines in the fiscal year 81 supplemental and fiscal year 1982 budget we project this situation will be corrected by late 83.

Question: What is the Defense Department policy concerning foreign military sales when these sales adversely affect the readiness of our own forces?

Answer: Section 36b of the AECA requires the Department of Defense assess and report to Congress the readiness impact of foreign military sales. Each sale is a case-by-case assessment and to date no FMS has caused an adverse impact on the readiness of the USAF. These assessments are fully coordinated positions of the SAF, SECDEF and SECSTATE.

MATERIAL READINESS

Senator **Levin**. General Davis, the 1982 Material Readiness Report shows mission-capable rates for our B-52 bomber force significantly below the Air Force requirement. This situation persists, with only some improvement, through fiscal year 1985. What is the reason for these low mission rates? What do these rates mean as far as the capability of the B-52 force to meet the day-to-day alert requirements of the SIOP?

General **Davis**. There are several reasons for the low mission capable rates for the B-52. Current spare parts deficits, as reflected in Figure 2 of my opening statement, directly impact the mission capability of the fleet. Moreover, the impact of fiscal year 1980 and 1981 deficits will be seen for at least two more years, the delivery time for fiscal year 1982 funded procurements. Maintenance technician manning and skill levels also impact on our ability to keep the fleet fully ready. I add the factors of recruitment and retention, especially of skilled mid-level supervisors, earlier in my opening statement. Finally, the age of the B-52 weapon system contributes to the difficulty of attaining high mission capable rates. Our program of onboard system modifications is expected to improve this factor. While those factors do cause us problems in meeting our daily operations and training requirements, let me again assure you that SAC can accomplish its nuclear warfighting mission.

AIR FORCE MISSION-CAPABLE RATES

Senator **Levin**. General Creech, the 1982 Material Readiness Report shows that we will not achieve our goal for first-line tactical aircraft by fiscal year 1985. What are the main constraints preventing our tactical aircraft from meeting the Air Force's own mission-capable goal?

What do these peacetime mission-capable rates mean for the wartime capability of these aircraft?

General **Creech**. The main constraints preventing our tactical stocks, and parts to carry military operations from initial war requirements until the production capacity of industry can output needed spares. The numbers of items vary part by part due to different lead time production. [deleted]. We have [deleted] days capability for each of our weapon systems at the wartime surge rates a European war would demand.

RELATIONSHIP OF C-RATINGS TO MISSION CAPABLE RATES

Senator **Levin**. General Allen, according to your statement, [deleted] of our airlift units, on the average, are fully or substantially combat ready."

How did the [deleted] figure relate to the mission capable rates on the 1982 Materiel Readiness Report, which say that in fiscal year 1983, 56 percent of our C-5 fleet, 64 percent of our C-130 fleet and 65 percent of our C-141 fleet will be mission capable?

General **Allen**. Mission-capable rates are peacetime management tools which represent the average time an aircraft is available to perform its tasked mission. These are historical figures that do not include any surge capability. Unit Status and Identity Report (UNITREP) combat readiness ratings represent the ability of a unit to expand capability to a wartime level. C-ratings reflect the unit commander's forecast of how many aircraft he can have mission ready within his unit's response time. The number of mission-ready aircraft reported in UNITREP is normally [deleted] than the mission-capable rate.

Because UNITREP measures other factors such as personnel and training, comparing mission-capable rates to C-ratings can be misleading. Both are readiness tools but each must be used in conjunction with other indicators to determine overall readiness.

MEASURES OF MERIT IN THEATER NUCLEAR CAPABILITY

Senator **Levin**. General Creech, on pages 6 and 7 of your statement you say, "The Soviets continue to enjoy at least a two-to-one advantage in all relevant measures of merit in theater nuclear capability."

Could you specify what are these "all relevant measures" and elaborate to provide detailed evidence of the Soviets' two-to-one advantage in each category?

General **Creech**. The measures of merit we examined include the number of warheads, the equivalent megatons these warheads represent, and a measure of potential nuclear capable delivery systems. Our 1982 estimate includes:

	Warsaw Pact	NATO	Ratio
Warheads		[Deleted]	
Equivalent megatons			
Delivery aircraft			
Land-based rocket/missiles			

No French systems were included in this estimate.

READINESS AND SPARES IMPROVEMENT

Senator **Levin**. General Davis, General Allen is there sufficient funding in the fiscal year 1983-1987 Air Force budget in the spares accounts, and in the other readiness accounts, to bring each type of your first-line aircraft up to its mission capability goal/ requirement by fiscal year 1987; by the end of the fiscal year 1987 funded delivery period?

Please provide the improvement in such rates supported by this budget plan through the end of the fiscal year 1987 funded delivery period.

General **Davis**. Yes, Senator Levin, we believe there is sufficient funding programmed to satisfy the spare parts and O&M requirements of SAC aircraft. If other programs such as the system modifications to improve reliability and retention of our skilled maintenance technicians are successful, we project a 10-12% increase in the number of fully mission capable aircraft.

General **Allen**. There is sufficient funding in the fiscal year 1983-1987 Air Force budget for our first-line aircraft to achieve defense guidance objectives. Our utilization potential will continue to increase as additional spares reach the shelves. Objective utilization rate capability should be reached in fiscal year 1985 for the C-5, fiscal year 1986 for the C-141 and C-130, and fiscal year 1987 for the H-1, H-3, and H-53 helicopters.

F-15 SPARES SHORTFALL

Senator **Levin**. General Creech, does the fiscal year 1983 Air Force program contain sufficient funding to fix the current spares shortfall per F-15 squadron of about $8 million per squadron? If not, why not? If not, at what point in the fiscal year 1983-1987 Air Force budget plan is this shortfall fixed?

General **Creech**. Yes. Funding for both peacetime operating stock (POS) and War Readiness Spares Kits (WRSKs) is sufficient to fix the current spares shortfall. However, as I mentioned before, production lead times of two years or more will be required on many of these critical parts. So it will be time before these parts actually get to the F-15 units.

READINESS ACCOUNT

Senator **Levin**. Do you have sufficient funding in the 1983 to 1987 period in the readiness account? When you do that, would you identify by dollar amount and program any shortfalls?

General **Davis**. From a SAC viewpoint, we can address only the 1983 funding levels contained in the President's Budget. This Budget tentatively includes $1,322,803.0 in constant 1982 dollars in all Major Force Programs (MFP) for SAC O&M compared to our expected level of funding for fiscal year 1982 of $1,213,824.0. The anticipated growth of $108,979.0 in fiscal year 1983 will support introduction of new programs or modifications to existing programs, but will provide little growth in other vital areas.

For example, flying hours per crew per month will remain below desired levels, and Real Property Maintenance (RPM) dollars continue to be constrained.

Base Operating Support (BOS) is increased enough to support the programmatic changes, but little is left for vital quality-of-life programs or to improve vital support functions such as Transportation, Base Supply, and Law Enforcement.

In mission areas, we need additional funding to improve our C^3 capabilities, to provide realistic simulators for crew proficiency training, to procure additional equipment to support the Strategic Projection Force, and to provide enhanced protracted warfighting capability. O&M dollars enable us to train and maintain our forces and build our warfighting capability.

SPARES AVAILABILITY

Senator **Levin**. General Creech, your statement says that the increased spares funding received in fiscal year 1982 will eventually improve our readiness posture. The fact is that in fiscal year 1981, funding for Air Force spares increased 115 percent from fiscal year 1980. When will we start seeing the effects of these large increases in spares in readiness rates for our tactical aircraft?

General **Creech**. With adequate spares funding available, production leadtimes become the driving factor in spares availability. We are beginning to see some beneficial effect already, but the major improvements occur some 18 months to two years after contract execution because of long vendor leadtimes. Thus, the major improvements in readiness status will be seen in 1983 and 1984.

LEVELS OF WAR-RESERVE STOCKS

Question. General Creech, what are out current levels of war‘reserve stocks in terms of days of supply in Europe and Korea?

Answer. For aircraft replenishment spares, we presently average [deleted] of supply for war-reserve stocks for all tactical aircraft. We determine sustainability based on aircraft type rather than geographic area.

WRM munitions sustainability varies by theater, aircraft type and target category. In Europe, total prepositioned stocks will be exhausted [deleted] at planned sortie rates. In the Pacific, total stocks would last [deleted]. However, the most capable weapons will be exhausted much earlier, all [deleted] will be expended within [deleted] in both theaters. All modern munitions will be exhausted within the [deleted] and only general purpose or cluster bombs and cannon ammunition will provide the remaining days of support.

MAJOR DEFICIENCIES IN CURRENT WAR-RESERVE STOCKS

Question. General Creech, what are the major deficiencies—spares, ammunition—in our current war-reserve stocks for both overseas in Europe and Korea and in the United States?

Answer. Previous underfunding has resulted in major deficits of aircraft war reserve spares. The average sustainability of spares for tactical forces is [deleted]. We determine sustainability based on aircraft type rather than geographic area.

[Deleted].

IMPROVEMENT TO WAR RESERVE STOCKS

Question. General Creech, how will your war reserve stocks improve with the fiscal year 1983 budget and by the end of the current Five-Year Defense Plan?

Answer. Presently, our war reserve stocks are inadequate. The average sustainability of tactical aircraft is [deleted]. With the increased funding in the 1983 budget, sustainability of the TAF will [deleted].

ALLIES SUSTAINABILITY GOALS

Senator **Levin**. General Creech, what are the sustainability goals of our allies' air forces in Europe? How does their current capability to wage a conventional war compare to ours in days of supply? How do our allies' sustainability postures affect our planning and strategy?

Answer. Although the US Air Force and the air forces of our allies all have sustainability goals, the lack of a common consistent methodology used to calculate these goals makes an accurate comparison impossible. Even in cases, such as NATO, where we share information on each others' armed forces, logistics is a national responsibility and detailed information on that subject is not available in peacetime. We develop USAF plans and strategy based upon that portion of the threat allocated to use under joint and alliance plans. Allied sustainability posture does not affect them.

CURRENT INVENTORIES OF AIR-TO-AIR AND AIR-TO-GROUND MISSILES

Question. General Creech, how do our current inventories of air-to-air and air-to-ground missiles in Europe and Korea compare with the wartime requirement?

Answer. (S) [deleted]. To give you a better picture of the status, I want to highlight our preferred missiles—those missiles now in production or projected for near term production. [deleted].

RAPID DEPLOYMENT FORCE TO SOUTHWEST ASIA

Senator LEVIN. General Creech, how quickly could you deploy a tactical air wing to Southwest Asia in support of the Rapid Deployment Force?

General CREECH. A typical tactical wing consists of 72 aircraft formed into three 24-aircraft flying squadrons. Using normal generation criteria for deployment timing, that is from a posture of absolutely no warning, the first squadron can be underway in less than [deleted] hours, with all three squadrons deployed by [deleted] hours. With any strategic warning, this can be cut to [deleted] hours for the first squadron and ready to go inside [deleted] hours for the other two. For closure times in theatre, one adds en route times, and we intend to go non-stop. By way of illustration, a non-stop F-15 deployment from Langley AFB, Virginia, to Dhahran, Saudi Arabia, takes approximately 15 hours. Thus, assuming tanker availability, we could be closing the first squadrons inside [deleted] hours from an execute order if we have advance warning. From a no-notice posture, we could close the first units well inside [deleted] hours. Tanker and airlift availability pace the overall flow time.

SUSTAINED SOUTHWEST ASIA OPERATIONS

Senator LEVIN. General Creech, what is our current capability for sustained Tactical Air Force operations from land bases in Southwest Asia? For example, do we have any fuel reserves currently available in Southwest Asia?

General CREECH. Our current capability to sustain operations from bases in Southwest Asia is dependent on diverting substantial logistics resources from other theaters of operation. This, of course, requires a tremendous amount of air and sea lift. Our current plan relies upon initial host nation support of our jet fuel requirement. We do have a limited quantity of jet fuel positioned aboard near term prepositioned ships. Defense Fuels Supply Center representatives are working to acquire contract support obligations for fuel requirements and commercial storage in SWA.

Accepting the availability of certain types of support from the host nation, two other goals must also be achieved if we are to have true sustainability for our forces. The first is increasing our war reserve stockpiles of munitions, and other critical items. The current fiscal year 1982 budget and the logistics programs being identified in this year's request will substantially improve our capabilities in this area. The second is securing agreements to allow us forward prepositioning of needed resources in that area of operation. This capability will reduce the heavy demand on the transportation system. Such agreements are being pursued on a priority basis right now.

FLYING HOUR SHORTAGES

Senator LEVIN. General Creech, you speak in your statement of shortages in flying hours needed for crew training. In your opinion, are there shortages in flying hours for tactical aircraft crews in the fiscal year 1983 budget? What systems are affected by these shortages and what would it take to fully fund a level of flying hours in the Tactical Air Command that maintains our aircrews' readiness?

General CREECH. The proposed 1983 budget contains 746,500 flying hours for the Tactical Air Command. While this is a slight increase over our 1982 program, the command requires nearly 802,000 hours to bring our aircrews to full readiness. The 1983 proposal is a carefully planned balance between our readiness goals and the level of flying we can support in terms of long lead time spare parts and personnel.

MARITIME SUPREMACY STRATEGY

Senator LEVIN. General Creech, defense experts are beginning to question the supposed maritime supremacy strategy of the present Administration. They worry that its preoccupation with building a Navy structured around enormously expensive nuclear carrier battle groups will divert resources away from meeting Army and Air

Force needs and actually reduce our capability to defend the Persian Gulf and NATO Europe. Do you share these worries as they relate to the Air Force and specifically your command?

General **Creech**. As I stated earlier, we support maritime superiority and a buildup of our maritime capability as part of a balanced approach towards strengthening our overall defense posture. We could not hope to sustain operations in NATO Europe or the Persian Gulf without protection of the sea lanes of communication upon which we would depend for resupply. The carrier battle groups are key to that defense. On the other hand, if the combat "punch" in those potential areas of conflict—supplied mainly by the Air Force and Army—were to be sacrificed to achieve that Naval buildup, we would have cause for concern. As my colleagues and I have stated, we have no deep concerns over the respective Services' funding priorities and proportions as they have been submitted to you. We have a balanced approach that takes into account the total combat capability of the total force—Army, Navy, Marine, Air Force; Active and Reserve—and upgrades our overall capability in a rational, well-programmed manner.

DEFENSE OF PERSIAN GULF AND NATO EUROPE

Senator **Levin**. General Creech, under the Five-Year Defense Program submitted by the Administration, will your command be able to carry out sucessfully its assigned responsibilities in defending the Persian Gulf and NATO Europe? If not, in which region and in which mission responsibilities will it fail?

General **Creech**: The fiscal year 1983–87 Five-Year Defense Plan (FYDP) submitted to Congress will go a long way toward enabling us to carry out our assigned responsibilities in the Persian Gulf and NATO Europe. However, the FYDP, even if fully implemented, will leave us well short in some critical areas, most notably in the tactical fighter force structure available to meet all our commitments. In my prepared statement I noted that sustainment of a 40 wing tactical fighter force (plus our strategic air defense force) requires procurement of 280 fighter aircraft per year. The FYDP does not begin to approach this procurement rate until fiscal years 1986 and 1987. I also indicated an urgent need for a minimum growth to at least 44 wings by the end of the decade. The rate of procurement contained in the fiscal years 1983–87 FYDP will not accommodate this growth. Our force size mismatch vis-a-vis the Soviets is only part of the picture. We must also procure the right kinds of tactical aircraft and systems to cope with the increasingly capable Soviet air and ground combat forces. To that end, our fiscal year 1983 budget request and fiscal years 1983–87 FYDP programs address force modernization needs to enhance our capability to fight outnumbered and win. AMRAAM, PLSS, LANTIRN, SEEK TALK and our requests for additional dual-capable aircraft for long-range interdiction missions are but a few examples of these critical programs. While the FYDP goes a long way toward improving combat capability of our forces, our position at the end of fiscal year 1987 will leave us somewhat short of being able to assure success simultaneously in both areas.

REQUIRED SPENDING TO CARRY OUT MISSION

Question. General Creech, what additional spending for what specific programs in each of these five fiscal years, especially fiscal year 1983, would be needed to enable your command to carry out its assigned missions in the Persian Gulf and NATO Europe?

Answer. As indicated in my prepared statement submitted to the Committee on Armed Services Preparedness Subcommittee, the Tactical Air Forces (TAF) have a number of requirements to satisfy our worldwide commitments. These include, just to name a few, retention of skilled personnel, increased force structure and specific improvements such as Precision Location Strike System (PLSS) for defense suppression, Low Altitude Navigation and Targeting Infrared System for Night (LANTIRN) for night attack, and the Ground-Launched Cruise Missile (GLCM) for theater nuclear capability. In addition, we must maintain the momentum in funding spares, modern munitions, aircrew training, and other readiness and sustainability requirements.

Regarding increased funding in fiscal year 1983 and the program years, the TAF requirements have successfully competed within overall Air Force fiscal constraints to balance the capability of the Air Force as a whole in line with the priorities established by the Secretary and the Chief of Staff of the Air Force.

WHY IF ANY WAS FUNDING DENIED

Question. Did the Air Force seek any of this additional spending in its budget request to the Office of the Secretary of Defense? What reasons were given as to why any of this funding was denied? Do you know whether it was to fund maritime-supremacy programs for the Navy?

Answer. Yes. The fiscal year 1983 Air Force budget request included numerous options to increase spending for the TAF over the FYDP period and, in fact, several options were exercised. Additional spending authority in the critical area of spares, munitions, aircraft procurement and military construction were included in the DOD budget request to take advantage of economics of purchase and balance TAF capabilities with other general purpose forces. As the adjustments were being made, I am unaware of reductions to other TAF programs to fund maritime-supremacy programs for the Navy.

WAR RESERVE MATERIEL

Senator **Levin**. General Creech, General Davis and General Allen, are you satisfied with your current levels was resources? What are the major deficiencies of your current war-reserve stocks? How will your war-reserve stockage levels improve with the fiscal year 1983 budget?

General **Creech**. We have previously identified several areas within War Reserve Materiel (WRM) which require immediate attention to bring us up to needed stockage levels. These include needs for adequate spare parts and the proper mix of munitions and associated racks, adapters, and pylons to sustain our aircraft at anticipated wartime sortie rates.

RDJTF support requirements highlight our many shortfalls in WRM.

The funding levels projected in the fiscal year 1983 allow for major improvements in all these areas of WRM—but it will take a continued, sustained commitment to readiness items to achieve an adequate, sustained warfighting capability.

General **Davis**. The current levels of war reserve stocks are not sufficient to sustain SAC forces in their conventional war-fighting role. The most serious deficiency is in the reserve stock necessary to sustain wartime flying levels until our industrial base can catch up with demand (OWRM). The fiscal year 1983 budget does not provide for SAC funding. The majority of the requirement is budgeted for in the outyears.

General **Allen**. As you know, spares requirements were severely underfunded in fiscal year 1980 and fiscal year 1981. We have been living out of our war readiness spares kits (WRSK) to support our peacetime flying hour program. In fiscal year 1982 we received full peacetime operating stock (POS) and WRSK funding. Due to lead-times we have not seen any significant improvement in full rates as yet. Fill rates are expected to gradually improve over the next two years. Major deficiencies in our war-reserve stocks are not solely caused by insufficient funding. Shortages also develop as a result of items which became critical for reasons such as lack of depot-level repair capability, contractor nonperformance and inadequate industrial base. These critical items have an adverse effect on the ability of the Military Airlift Command to accomplish its mission. Full funding of POS and WRSK has been projected in the fiscal year 1983 budget. This will allow us to continue to fill our stock levels which will reduce spares limitations so that we can begin to reach our objective utilization rate. The POS and WRSK funding initiatives coupled with projected other war reserve materiel funding will permit us to reach our sustainability objective in fiscal year 1985–86.

PREPARATIONS FOR SUSTAINABILITY

Senator **Levin**. Generals, last week the Chairman of the Joint Chiefs, General David Jones, told our committee that the five-year plan in the defense budget to improve the sustainability of our forces, the number of days they have sufficient ammunition, fuel, spare parts and other supplies to be able to continue to fight does not accomplish this objective as quickly as desirable. Do you agree?

General **Davis**. Spare parts needed for sustainability are programmed as OWRM. Certainly the funding outlook, as presented in Figure 2 of my opening statement, will not satisfy the requirement as quickly as desired.

The SAC fuel requirements at SAC bases are generally satisfied. However, there is a substantial shortfall for support of SAC conventional mission forces which will operate from bases in the Pacific and Europe. Those deficits are programmed by those theater commanders, but they are not being satisfied as quickly as desired.

Munitions are also short, and this is expanded upon elsewhere.

SUSTAINABILITY NEEDS

Senator **Levin**. Generals, what are your respective commands' sustainability needs which are not adequately and rapidly enough addressed in this Five-Year Defense Program, especially in the fiscal year 1983 budget? Please provide yearly data for each of the five years.

General **Creech**. Funding for sortie surge is one area that needs greater attention. As presently programmed, there is a gap in funding in fiscal year 1985 that will impair our effort at increasing capability. A more consistent schedule of funding would provide surge capability for some weapons systems at an earlier date and allow continuous production vice intermittent production, which invariably ends up costing more.

Sortie surge—as presently programed in the budget

Fiscal year:	*Millions*
1983	0
1984	$55.6
1985	0
1986	272.3

General **Allen**. The following chart depicts our sustainability shortfall vis-a-vis defense guidance objectives:

[Dollars in millions]

Weapons System	Fiscal year 1982 unfunded carry-over requirement	Fiscal years	
		Funding completed	Objective achieved
C-5	$12.6	1983	1985
C-130	39.4	1984	1986
C-141	45.8	1984	1986
H-1	.9	1985	1987
H-3	1.2	1985	1987
H-53	7.2	1985	1987

If the projected funding is made available, our utilization rate capability will continue to increase. We would like to be closer to meeting our objective; however, this is certainly an improvement over where we would be if Congress had not taken positive funding action during the past year.

General **Davis**. Funding requirements for spare parts needed for sustainability are shown in Figure 2 of my opening statement. The figures presented for each fiscal year include the deficit carryover from the prior year. Therefore, if the program were accelerated to fund the entire $117 million requirement in fiscal year 1983, there would be little additional requirement remaining in fiscal year 1984–87.

Munitions are funded and procured through the Other Procurement Appropriation. Requirements for SAC aircraft are included with all other delivery aircraft in determining conventional munitions requirements by theater scenerio. The total Air Force munitions procurement program through the Five Year Defense Plan, meets the Defense Guidance for all weapons programmed to be carried by SAC aircraft. If these funding requirements are met we have no additional requirements.

Facilities for prepositioned munitions require early funding to insure protection of the WRM mentioned above.

ALLIES SUSTAINABILITY GOALS

Senator **Levin**. Generals, what are our allies' sustainability goals for their air forces? How does their current capability to wage a conventional war compare to ours in days of supply? How do our allies' sustainability posture affect our planning and strategy?

Answer. Although the U.S. Air Force and the air forces of our allies all have sustainability goals, the lack of a common consistent methodology used to calculate these goals makes an accurate comparison impossible. Even in cases, such as NATO, where we share information on each others armed forces, logistics is a national responsibility and detailed information on that subject is not available in peacetime. We develop USAF plans and strategy based upon that portion of the threat allocated to us under joint and alliance plans. Allied sustainability posture does not affect them.

APPROVED SUSTAINABILITY LEVEL

Senator **Levin**. Generals, under the Reagan Five-Year Program we do not expect to reach the approved sustainability level, which is less than the required level, until the last year of the program. When do you expect our allies to reach even the approved level, if ever?

Answer. Although many of our allies are making conscientious efforts to improve their sustainability posture, a lack of information and a common methodology makes it impossible for us to accurately compare their goals with ours.

MAC TRAINING REQUIREMENTS

Senator **Levin**. Generals, there is a proposal being considered by the Military Reform Caucus to either double the amount of funds available to each service for unit training or to significantly increase it. Are such increases needed for your respective commands, and how much, and for what types of exercises? And can these funds be used efficiently and how would you propose to use them?

General **Allen**. Our exercise role is one of supporting other services and commands. We are currently flying an exercise program of 62,000 C-141 equivalent hours and could support increases in the range of 5 to 10 percent without degrading service to our remaining transportation users or other phases of our aircrew training.

As stated earlier, our C-5 aircrews are flying minimum hours because of the aircraft's wing life constraints. We have included in the fiscal year 1983 President's Budget additional flying hours for our pilots to provide a higher, more desired level of proficiency as sufficient aircraft return from wing modification. To provide necessary flexibility to meet our global commitments, there will be a requirement for three aircrews qualified and current in air refueling for each PAA aircraft.

As wing modified C-5s enter the force, additional training with the other services can be productively utilized in the Joint Airborne/Air Transportability Training (JA/ATT) program. Our plan is to increase the JA/ATT program; however, shifting these hours from the channel to the JA/ATT category will require additional O&M funding.

In the C-141, additional training flying hours for Brigade D airdrop, increased air refueling crews, Special Operations Low Level II, and unfamiliar route training will be required.

No additional flying hours are necessary for C-130 training since current levels completely satisfy our training requirements.

All the shortfalls identified require approved flying hours and corresponding funding to insure a more capable and survivable airlift force. The hours represent our minimum requirements, and they will be carefully managed to maximize airlift capability.

FORCE SUSTAINABILITY

Senator **Levin**. General Davis, an unclassified chart in your secret statement shows full funding in fiscal years 1983-1987 in two of three categories of needed spare parts to keep SAC ready. These are peacetime operating stocks, POS, and war-reserve spares kits, WRSK, which keep you operating for the first 30 days of a war. However, your funding in the "other war-reserve material," OWRM, category shows great fluctuations and significant underfunding between fiscal year 1983 and fiscal year 1987.

Since these are the spares needed to fight a war after the first 30 days, how much of this underfunding reflects the Administration's belief that a nuclear war will not last beyond 30 days, despite all its rhetoric about "enduring nuclear warfighting capability"?

General **Davis**. Senator Levin, the spares requirement shown in Figure 2 of my opening statement has been established primarily to support the conventional mission role of SAC. However, these OWRM spares do provide for a level of support that is needed for a prolonged nuclear conflict as I noted.

I can't speak for the administration, of course, but SAC is currently involved in an indepth study of our capability for "enduring nuclear warfighting". After we have finished sorting out the impacts on SAC, our budget requirements may indeed change.

FUNCTION OF OWRM

Senator LEVIN. General Davis, how much of the above funding profile, even as erratic as it is, is devoted to spares for long-term conventional war fighting and for nuclear war fighting? Provide a yearly breakdown for the five-year program.

General DAVIS. All of the funding requirement for War Readiness Spares Kits (WRSK) and for Other War Reserve Materiel (OWRM) currently reflects spares needed for long term conventional warfighting. However, availability of these spares also provides an added capability to support requirements for enduring prolonged nuclear warfighting. The requirement and projected funding for the next 5 years is provided in Figure 2 of my opening statement.

OWRM PROGRAM

Senator LEVIN. General Davis, wouldn't it make more sense to build a stable program instead of zero percent in fiscal year 1983, 36 percent in fiscal year 1984, 11 percent in fiscal year 1985, 78 percent in fiscal year 1986 and 9 percent in fiscal year 1987? Why was this program structured this way?

General DAVIS. The OWRM program depicted in Figure 2 appears erratic because it portrays only SAC's portion of the total Air Force Program structured under the Defense Guidance.

Our OWRM program is a stable program for achieving the force sustainability goals outlined in the guidance and recouping the Air Force sustainability shortfalls in other priority programs, such as strategic airlift. We have provided an orderly funding of SAC aircraft starting with the C-135 funding in fiscal year 1984; C-135 is fully funded to the Defense Guidance objective in fiscal year 1985, and will achieve the full Defense Guidance capability in fiscal year 1987. The B-52 is funded to the Defense Guidance objective in fiscal year 1986.

B-1B OWRM

Senator LEVIN. General Davis, how much of the fiscal year 1986 funding at the 78 percent level is connected with the B-1? Why is there such a large jump this year?

General DAVIS. There is no B-1 OWRM in fiscal year 1986. The apparent large jump in fiscal year 1986 results from deferment of the requirement in earlier years.

WHY NO C-130S IN THE FISCAL YEAR 1983 BUDGET?

Senator LEVIN. General Allen, the Air Force has not procured any C-130s for the Active force since fiscal year 1974. Since that time, the Air Force has addressed tactical and strategic airlift programs, that is, the now defunct AMST and the CX programs. The committee is aware of a C-130 shortfall—14 for the Active force plus 14 for the Guard and Reserve. Why are there no C-130s requested in your fiscal year 1983 budget?

General ALLEN. The Air Force evaluated C-130 acquisition proposals in its fiscal year 1983 budget development process. Due to aircraft acquisition priorities, overall Air Force needs, and fiscal restraints, proposals to procure additional C-130s did not compete well enough to be included in the Air Force budget submission.

ARE THERE ANY C-130S IN THE FISCAL YEAR 1984 POM?

Senator LEVIN. General Allen, has the Air Force requested any C-130s in the fiscal year 1984 Program Objective Memorandum (POM)? Were any requested for fiscal year 1983 in the fiscal years 1983-1987 POM? If not, why not, considering the shortfalls; if so, why were they deleted from the final budget?

General ALLEN. The Air Force is evaluating two proposals to procure C-130s in the 1984-1988 POM. The Air Force also evaluated a proposal to procure C-130s in the fiscal years 1983-1987 POM. Procurement of C-130s was removed from the 1983 POM due to that initiative not being able to compete well enough on a program priority basis with other Air Force requirements.

FISCAL YEAR 1984 POM REQUEST FOR C-130S

Senator LEVIN. General Allen, will the fiscal year 1984 POM request enough C-130s to cover the current shortfalls of both the Active Force and the Guard and Reserve?

General **Allen**. The fiscal year 1984-88 POM initiative includes Guard and Reserve C-130Es to modernize C-130A squadrons so those aircraft, which are currently experiencing severe corrosion problems due to age, could be retired. This proposal will have to compete through the Air Force budget development process.

ADDITIONAL C-130 SQUADRON IN EUROPE

Senator **Levin**. General Allen, is an additional C-130 squadron needed in Europe? If so, when would they be procured?

General **Allen**. We have a pressing need for additional intratheater airlift in Europe. Airlift studies such as the fiscal year 78 Intratheater Airlift Movement Analysis and the 1980 MOTA Study continue to show serious shortfalls in intratheater airlift in Europe. An fiscal year 1984 POM initiative to procure additional C-130Hs includes adding another squadron for European support. If this initiative is funded in fiscal year 1984, the aircraft would actually be delivered in fiscal year 1986.

TRANSFER OF C-130 ASSETS TO THE GUARD AND RESERVE

Senator **Levin**. General Allen, with the Air Force's current shortfall and possible new requirements, will C-130 assets be transferred to the Guard and Reserve in the next few years?

General **Allen**. We have no plans to deactivate active squadrons and transfer C-130 assets to the Guard and Reserve. An initiative is under review for fiscal year 1984 to purchase C-130Hs which would allow for modernization of some of our Active C-130E squadrons. The C-130Es would then be transferred to the Guard and Reserves to modernize the C-130A squadrons so those aircraft, which are currently experiencing severe corrosion due to age, could be retired.

TOTAL CURRENT AND OUTYEAR C-130 REQUIREMENTS

Senator **Levin**. General Allen, what are the total current and outyear—through fiscal year 1987—new C-130 requirements for (1) airlift, (2) weather service, (3) air rescue service, and (4) special missions? This should include the total Guard and Reserve requirements as well as the Active forces.

General **Allen**. (1) Our total C-130 requirements for airlift through fiscal year 87, are 169 C-130Hs. This would add an additional squadron for European support (16 PAA, 2 BAA), fill the 28 BAI shortfall, and replace the 114 C-130As and 9 C-130Ds which are experiencing corrosion problems. A serious shortfall in intratheater airlift during the early days of an [deleted] conflict is evident, and analysis continues to show a D-day requirement for at [deleted]. Initiatives to procure additional C-130s for European support in both the fiscal years 83 and 84 POM were aimed at alleviating this shortfall. However, procurement of additional C-130s will not satisfy all intratheater airlift requirements as the C-130 is not capable of carrying outsize cargo. Our outsize cargo requirement can only be satisfied by a C-17 type aircraft. (2) We have no requirement for additional weather C-130s. (3) The conversion of 20 HC-130Hs to tanker configuration will satisfy Aerospace Rescue and Recovery Service needs through fiscal year 1987. (4) We cannot address the special mission requirements as this mission falls out of the purview of MAC.

SPECIAL MISSION

Special mission MC-130H requirement through 1987 is 19. All aircraft are for active special operations forces. A consolidated reply will be developed.

Senator **Humphrey**. The subcommittee is adjourned.

[Whereupon, at 12 noon, the subcommittee was adjourned, subject to call of the Chair.]

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

MONDAY, MARCH 1, 1982

U.S. Senate,
Subcommittee on Preparedness,
Committee on Armed Services,
Washington, D.C.

U.S. ARMY OPERATION AND MAINTENANCE

The subcommittee met in open session, pursuant to notice, at 9:30 a.m., in room 212, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senators Humphrey, Stennis, and Levin.

Staff present: Michael B. Donley, and David S. Lyles, professional staff members; Christine E. Cowart, chief clerk; and Carol J. Rudolph, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator **Humphrey**. Good morning. The subcommittee meets today to receive testimony on the Army's 1983 Operation and Maintenance request.

We are pleased to have with us this morning Lt. Gen. Ernest D. Peixotto, Comptroller of the Army; Maj. Gen. William E. Eicher, Assistant Deputy Chief of Staff for Logistics; and Brig. Gen. Roger J. Price, Director of Operation and Maintenance, Army appropriation.

The purpose of this hearing is to gain a broad understanding of the Army's O. & M. requirements for fiscal year 1983. This must, first of all, involve an explanation of the Army's priorities and objectives and how the O. & M. budget is structured to support these goals.

Second, we will review the full range of items contained in the O. & M. request, especially items related to other subcommittees such as force modernization and civilian personnel and those issues such as logistics and training which will not be addressed in subsequent hearings.

Finally, we hope to gain a clear view of how individual items within the O. & M. request are integrated to provide for improved readiness and balance within the Army program.

Senator Stennis?

Senator **Stennis**. Mr. Chairman, I am delighted that I can be here. I have a general interest in the subject matter, and I am here to learn.

Senator **Humphrey**. Thank you, Senator Stennis.

General Peixotto, you may proceed as you wish.

STATEMENT OF LT. GEN. ERNEST D. PEIXOTTO, USA, COMPTROLLER OF THE ARMY; ACCOMPANIED BY MAJ. GEN. WILLIAM E. EICHER, USA, ASSISTANT DEPUTY CHIEF OF STAFF FOR LOGISTICS, AND BRIG. GEN. ROGER J. PRICE, USA, DIRECTOR OF OPERATION AND MAINTENANCE, ARMY APPROPRIATIONS

General **Peixotto**. Thank you, Senator Humphrey. If I may, I will proceed with my short statement.

Senator **Humphrey**. Thank you.

General **Peixotto**. I am pleased to appear before you in support of the Operation and Maintenance, Army, OMA, appropriation. I will discuss the total Army Operation and Maintenance, or O. & M. requests; Active, Guard, and Reserve. I understand that you will hold separate hearings for the Reserve components.

At this time I would like to enter a longer and more detailed version of the OMA statement into the record and to introduce those personnel with me today.

In preparing for this hearing, my first appearance before your committee as the Comptroller of the Army, I note the significant changes made by Congress to include the operation and maintenance appropriations in the authorization process. However, I am familiar with this process from my years in the research and development and procurement arenas and as the Director of the Army Budget.

I believe that the addition of the O. & M. appropriations to the authorization process has substantially increased their visibility and as a result will help focus on readiness. We thank you for the support you have shown during this first year of this new procedure.

Talking about these appropriations without first setting the stage of the Army direction during fiscal year 1983 is of little use because the improvements in our request relate directly to our missions and goals.

Let us now turn to the Army's missions and goals for fiscal year 1983.

ARMY'S MISSIONS AND GOALS

The U.S. Army's mission is to deter any attack against the national interests of the United States and, if deterrence fails—and we certainly hope it wouldn't—to engage and defeat any enemy in any environment. The scope of this mission has grown significantly as our Nation has matured and extended its sphere of interests and in the foreseeable future can be expected to expand even more.

The increased threat to our country places great demands on the total Army—the Active Army, the Army National Guard, the Army Reserve, and the Department of the Army's civilian employees.

The total Army must be capable of supporting a force of adequate size and composition and have the capability to protect vital national interests. Army combat forces require flexibility to meet the full spectrum of warfare, ranging from counterterrorism to intense conventional or nuclear conflict. A balanced, flexible force is essential to meet this demanding requirement.

To achieve these requirements we have established seven objectives. They are, first, to man the force with sufficient numbers of competent soldiers and civilians; second, to train our soldiers to carry out their assigned duties; third, to modernize the existing 24-division force by organizing and equipping units; fourth, to be able to mobilize the industrial base with adequate personnel to assure sustained combat; fifth, to be able to deploy the Army by means of airlift, sealift and pre-positioned equipment; sixth, to sustain the deployed force with support units, war-reserve materiel, ammunition and fuel; and, finally and not the least in importance, to demonstrate our esteem or high regard for the welfare of our soldiers, their families and the civilian work force by improving their living and working environments.

1983 ARMY BUDGET

The fiscal year 1983 Army budget supports these seven objectives and will provide many of the improvements needed to support an Army capable of fulfilling its worldwide mission.

Fiscal Year 1983 Army Budget Objectives

This budget supports improvements which will ready the Army to react fully and flexibly to divergent worldwide threats to our national interests.

Manning the Force.
Training the Force.
Modernizing the Force—Structure; Equipment; Facilities.
Mobilizing the Force.
Deploying the Force.
Sustaining the Force.
Esteeming (enhance quality of life).

In order to more efficiently meet these objectives within the resources requested, the Army, as part of a substantial Department of Defense program, has aggressively pursued a program of efficiencies and economies.

ARMY EFFICIENCIES AND ECONOMICS

We have established an Efficiencies, Economies, and Management Improvement, EEMI, program because there is a direct relationship between efficient use of resources and Army readiness, making it essential for the Army to manage its resources wisely and well.

The Chief of Staff of the Army has stated: "Reduction of fraud, waste and inefficiency is a fundamental mission * * * for efficiency improves readiness."

He has directed the implementation of a detailed, long-term, noncosmetic action plan, "Efficiency in the Use of Army Resources," operated through the chain of command.

Controlling the cost growth in major weapon systems is a primary target for improvement. We have thorougly examined the way we manage weapon systems development and have formed a Cost Discipline Advisory Committee whose members, selected from private industry, have reviewed our cost-control procedures. They made positive recommendations that we are aggressively implementing, which, I might add, will be implemented by June of this year.

With this budget the Army has made a comprehensive effort to identify savings and efficiencies. Auditable savings or cost avoidance have been incorporated into the planning, programing, and budgeting systems. Savings have been identified in acquisition improvements, productivity enhancements, and value engineering through audits and inspections.

Many of our savings result from the good work of our soldiers and civilians. The total fiscal year 1983 Army savings and cost avoidance contained in the budget for all appropriations exceed $600 million.

This fiscal year 1983 OMA budget request includes 34 separate initiatives which have resulted in estimated annual savings or cost avoidance of $364 million. Among these initiatives are fiscal year 1982 reductions for savings already achieved as a result of improved supply discipline, maintenance improvements, and elimination of other marginal programs. They amount to $75 million and are identified on page 97, 108, and 109 of the March 1981, fiscal year 1982 amendment.

These savings, along with the audio-visual reduction in the June 1981, fiscal year 1982 amendment, are incorporated in the current fiscal year 1982 estimate of this budget request and are, therefore, extended into the fiscal year 1983 budget request.

Another $289 million reported as savings represents cost avoidance initiatives where decisions were made and actions taken which will reduce future operating costs. Examples of these initiatives are consolidations of telecommunications centers, purchase of ADP equipment when cost effective, utilities savings from energy-conservation measures and contracting out the demilitarization of ammunition.

Work is underway for a better means of measuring and identifying all of the Army's efficiencies, economies, and management-improvement initiatives in future budget submissions. If not for these savings we would require in this appropriation $364 million more to execute our fiscal year 1983 program as presented to you.

IMPORTANCE OF O. & M. APPROPRIATIONS

Before going into the details of the fiscal year 1982 and fiscal year 1983 requests, I would like to share my thoughts about the importance of the O. & M. appropriations, because O. & M. is readiness funding.

The total level of funding for O. & M. is directly related to the combat readiness of the Army and its ability to accomplish its missons. These dollars support the essential day-to-day activities of our units as their soldiers and leaders are trained and as equipment is operated and maintained. The linkage of these appropriations to readiness is obvious. Having well-trained units with operational equipment and adequate logistical depth means being ready.

The constituencies for O. & M. are the hundreds of commanders leading our 784,000 Active, 417,000 Guard, and 269,000 Reserve soldiers who depend on us to see that they have the resources to do their work.

Since the O. & M. accounts furnish the daily support to the Army, they must be supportive of and closely linked to decisions involving changes in the military personnel and investments accounts. There is a very close link between the size and composition of the force and the O. & M. accounts.

For example, as military strength increases or decreases, individual training, medical care, recruiting support, and certain base operating funds vary in close relationship to the strength during the same year.

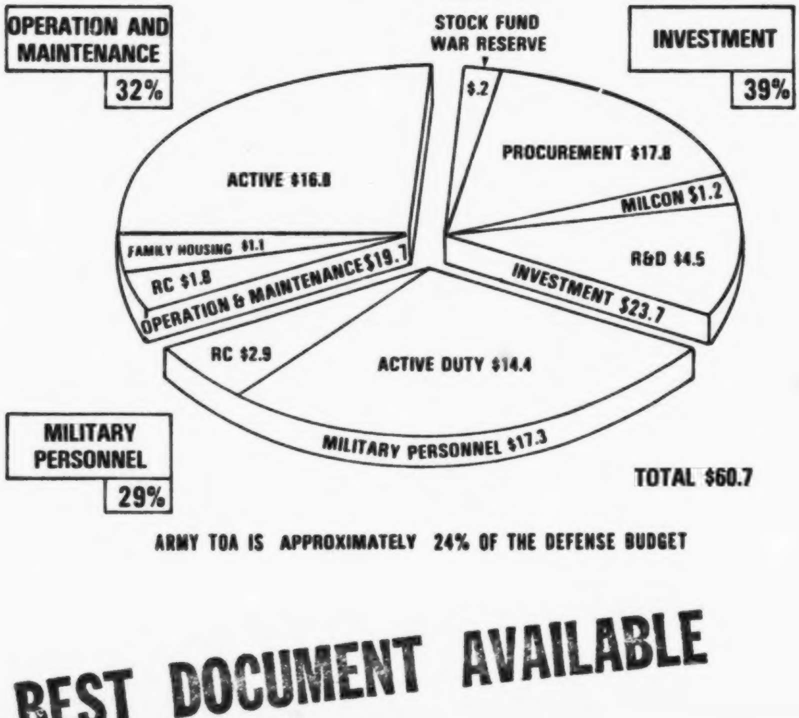
Although the linkage between the procurement and construction accounts and O. & M. is equally close, there is a time lag. For example, funds in the fiscal year 1983 OMA budget request are required to purchase fuel, repair parts and specialized training for the M60A3 tanks authorized and appropriated by Congress 2 years ago. This is due to the time it takes to produce this equipment. This equipment will be delivered to our units in fiscal year 1983.

However, during fiscal year 1983 we require OMA funds to support the procurement actions, engineering support, initial provisioning, and long leadtime training for new equipment.

The linkage between the operating, personal and investment appropriations is critical to providing adequate and balanced support to achieve an army that maintains near-term readiness and essential modernization.

Let me now turn to the fiscal year 1983 budget request:

THE ARMY BUDGET REQUEST
FISCAL YEAR 1983
($ IN BILLIONS)



ARMY TOA IS APPROXIMATELY 24% OF THE DEFENSE BUDGET

BEST DOCUMENT AVAILABLE

Chart 2 reflects the Army fiscal year 1983 budget request of $60.7 billion. Of that amount, 32 percent is for the O. & M. accounts, with $16.8 billion for the Active, $1.1 billion for the Guard, and $700 million for the Reserve.

The three O. & M. appropriation's requests total $18.6 billion, which is $1.5 billion higher than the current fiscal year 1982 estimate. This increase consists of $1.1 billion or 6 percent, due to inflation, and $400 million, or 2.5 percent, in real growth.

At this time I would like to digress from my prepared statement and put this growth into perspective. This small growth of 2.5 persent is less than the 20-percent program growth in the procurement accounts. Growth in both these accounts is essential not only to achieve readiness in 1983, but also to achieve readiness in 1986.

As the Chief of Staff mentioned a couple of years ago, we have a "hollow" Army.

We have done a lot to fix the O. & M. of the Army. We still have a problem of the "hollow" Army as far as equipment is concerned. We have inadequate equipment for the Guard, the Reserve, and our war-reserve stocks; therefore, the investment this year in fiscal year 1983 and the procurement accounts is essential.

If we fail to invest in procurement in 1983, it will cause serious readiness shortfalls in 1986 and beyond when that equipment is delivered. Our equipment shortages are well documented and we will be happy to discuss them in detail here, but I think you would rather do that with other elements of the Army staff.

Thus, the issue seems to be, is the projected O. & M. growth adequate to fully insure readiness?

Let me touch briefly on what this growth does not provide—an adequate civilian workforce, significant increase in training above the fiscal year 1982 levels, adequate training base opeations support, particularly in our "Training and Doctrine Command," and adequate reductions to the backlog of maintenance and repair of our facilities.

I am equally concerned about the possibility of congressional reductions in this O. & M. budget. If reductions are made, we would have to take them in the nonfixed cost area. Since approximately 80 percent of the O. & M. budget is relatively fixed—and that is the cost of heating, lighting, pay and so on—most reductions would impact on our facility maintenance effort to improve the soldiers' living and working facilities, the depot maintenance program, where we must overhaul and repair our older combat equipment, and, finally, it would cause a reduction in unit training, and readiness of the Army would be reduced.

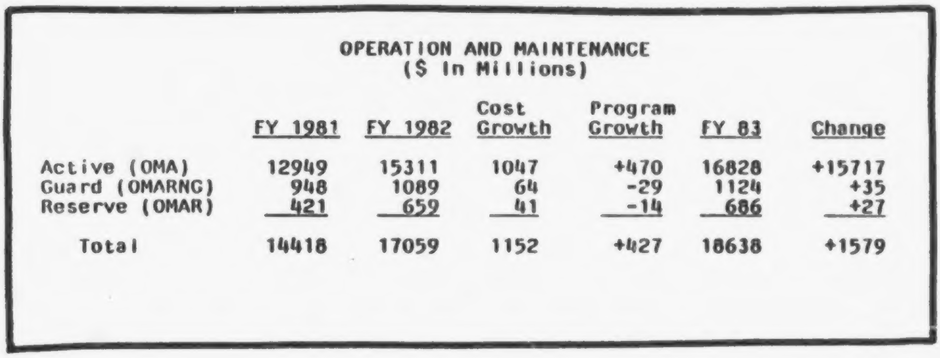
1982 SUPPLEMENTAL REQUEST

In addition to the fiscal year 1983 request, we have a fisal year 1982 supplemental request of $365 million pending. The largest share of this, $275 million, is to reduce the backlog in the maintenance of the Active Army's real property facilities. Not included in the fiscal year 1982 estimate is $278 million for the civilian pay raise which went into effect on October 1, 1981. I understand that this pay supplemental will be forwarded to the Congress at a later date.

The fiscal year 1983 budget now before your committee was first reviewed during the program cycle which began in January 1977. The numerous reviews which have taken place in the ensuing 5 years have been programmatic or functional. As such, the reviews have been multiappropriation in nature, looking at the total resources, dollars and manpower, to perform a function.

Also, because the O. & M. appropriations are best managed through decentralization, the major command and their subordinate installations have also adjusted their program and budget data as workload and missions changes during this period. The budget data submitted in June of 1981 from the major commands for fiscal year 1983 were additionally subjected to a programmatic review by the DOD and the Office of Management and Budget examiners this fall. Therefore, the Army's budget submitted to the Congress on February 8, 1982, reflects, as best it can, compliance with the Defense Guidance and the need of the Army to support national priorities.

This evaluating and updating process results in net cost and program growth changes, as displayed in chart 3.



OPERATION AND MAINTENANCE
($ In Millions)

	FY 1981	FY 1982	Cost Growth	Program Growth	FY 83	Change
Active (OMA)	12949	15311	1047	+470	16828	+15717
Guard (OMARNG)	948	1089	64	-29	1124	+35
Reserve (OMAR)	421	659	41	-14	686	+27
Total	14418	17059	1152	+427	18638	+1579

Chart 3

In the OMA appropriation there is a net change of $470 million in program growth. The major item changes are $500 million for equipping the force, $200 million for increased civilian end strength, plus another $200 million for a myriad of other small changes, and a decrease of $400 million for real property maintenance and repair.

Increases in the area of equipping the force are to support the new hardware items being introduced during the fiscal year. The increase in civilian end strength of approximately 2,000 spaces over fiscal year 1982 allows us to initiate a modest civilian substitution program and to increase support for training areas, material maintenance and base operations. The large decrease in the real property maintenance and repair area is due to the substantial one-time increases in the fiscal year 1982 estimate, and that includes the $275 million in the supplemental.

The $29 million negative growth in the O. & M. National Guard appropriation is due to a substantial one-time fiscal year 1982 purchase of $67 million of readiness supplies and equipment not extended into fiscal year 1983, plus an additional reduction of $9 million for the conversion of 600 civilian positions from the O. & M. account to the military pay account to become full-time military positions.

However, despite this net decrease the appropriation does not have three large program growth items—$21 million to support new equipment being fielded, $12 million to be used for repair and maintenance of training sites and logistics facilities, and $14 million to fund additional equipment and supplies to support modernization and training readiness, transportation and recruiting support.

The O. & M. Army Reserve appropriation negative growth of $14 million is due, as was the case with the National Guard, to a one-time purchase in fiscal year 1982 for supplies and equipment not extended into fiscal year 1983, conversion of civilian recruiters to military, the closure of Fort MacArthur, Calif., and a decrease in the depot maintenance account.

The Reserve's largest increases are $30 million for additional equipment, organizational clothing and repair parts, $13 million to support modernizing the force equipment, $11 million for additional premobilization training, $9 million for support of the rapid reinforcement of NATO and another $6 million for force structure changes.

Despite the small real program growth of 2.5 percent, as I mentioned earlier, each appropriation has requirements for additional funds. In the Active O. & M. Army account there are two such areas—the maintenance and repair of our facilities, and the support of our training base.

Except for Europe, all major commands reflect an increasing backlog in the area of real property maintenance. To remedy this situation, we could effectively use an additional $300 million to reduce the backlog in the United States and the Pacific.

TRAINING BASE MANPOWER POSTURE

For a number of years the Army's training base has had insufficient resources to conduct training and furnish base operations support the way we would like. The Army is currently reviewing the training base manpower posture in an attempt to further verify mission requirements and determine shortfalls. Once these shortfalls are identified, affordability options will be developed by the Army Staff.

In the Guard O. & M. account there are three areas where additional funds could be used. As with the Active component, $24 million could be used to decrease our backlog of maintenance and repair and to perform additional construction. We could use an additional $13 million for organizational clothing and equipment for the individual soldier and $10 million for base operations support in several areas.

In the Reserve O. & M. account there are 2 areas where additional funds could be used. As in the case of the Active and the Guard components, $8 million could be used for real facility maintenance. There is a requirement for $4 million for personnel support in the recruiting area and ADP systems for Reserve component pay.

In summary, our request is part of a budget that is balanced Army-wide. The Active, the Guard and the Reserve O. & M. appropriations furnish the day-to-day support to the total Army and thus play a coordinated role in the Army's support of the Nation's security posture.

We ask your support for this request.

I am prepared to answer any questions you may have.

Senator HUMPHREY. Thank you, General Peixotto.

[Prepared statement of General Peixotto follows:]

PREPARED STATEMENT OF LT. GEN. ERNEST D. PEIXOTTO, COMPTROLLER OF THE ARMY, DEPARTMENT OF THE ARMY

INTRODUCTION

I am pleased to appear before you today in support of the Operation and Maintenance, Army (OMA) Appropriation.

My purpose is to provide you with an overview of the largest appropriation in the Army's budget. The FY 1983 request is $16.8 billion.

I plan to present:

- The Army's Missions and Goals for FY 1983
- Efficiencies, Economies and Management Improvements
- The Relationship between OMA and Readiness
- The Current FY 1982 Budget Estimate
- The FY 1983 OMA Budget request

THE ARMY'S MISSIONS AND GOALS FOR FY 1983

The United States Army's mission is to deter any attack against the national interests of the United States and, if deterrence fails, to engage and defeat any enemy in any environment. Today and in the forseeable future the scope of this mission has grown significantly as our nation has matured and extended its sphere of interests. The increased threat to our country places great demands on the Total Army - the Active Army, Army National Guard, Army Reserve and the Department of the Army (DA) civilian employees.

The Total Army must be capable of supporting a force of adequate size, composition and capability to protect vital national interests. Army combat forces require flexibility to meet the full spectrum of warfare ranging from counter-terrorism to intense conventional or nuclear conflict. A balanced flexible force is essential to meet this demanding requirement. To achieve requirements, we have established seven objectives. They are:

First, man the force with sufficient numbers of competent soldiers and civilians.

Second, train our soldiers to carry out their assigned duties.

Third, modernize the existing 24-division force by organizing and equipping units.

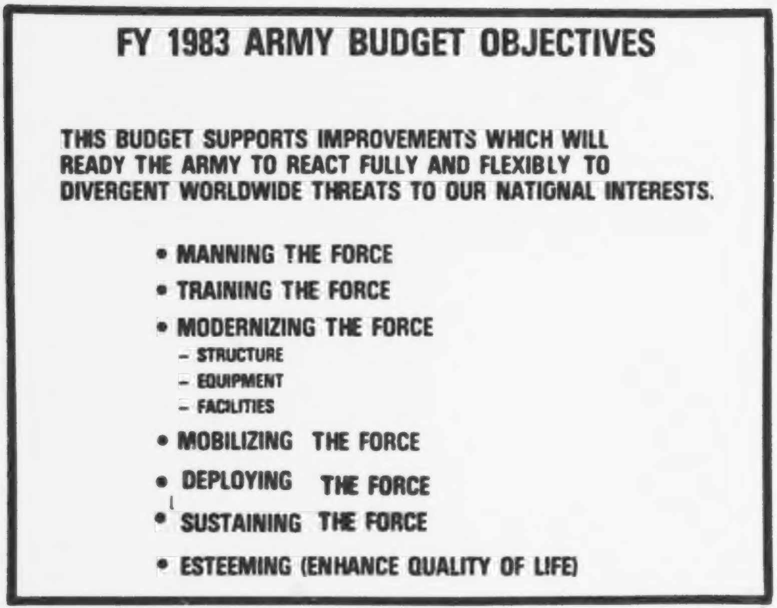
Fourth, be able to mobilize the industrial base and adequate personnel to assure sustained combat.

Fifth, be able to deploy the Army by means of airlift, sealift and prepositioned equipment.

Sixth, sustain the deployed force with support units, war reserve materiel, ammunition and fuel.

Finally, and not the least in importance, demonstrate our esteem, or high regard, for the welfare of our soldiers, their families and the civilian workforce by improving their living and working environment.

The FY 1983 Army Budget supports these seven objectives and will provide many of the improvements needed to support an Army capable of fulfilling its world-wide mission. However, this budget will not fully meet the total Army requirements.



FY 1983 ARMY BUDGET OBJECTIVES

THIS BUDGET SUPPORTS IMPROVEMENTS WHICH WILL READY THE ARMY TO REACT FULLY AND FLEXIBLY TO DIVERGENT WORLDWIDE THREATS TO OUR NATIONAL INTERESTS.

- MANNING THE FORCE
- TRAINING THE FORCE
- MODERNIZING THE FORCE
  - STRUCTURE
  - EQUIPMENT
  - FACILITIES
- MOBILIZING THE FORCE
- DEPLOYING THE FORCE
- SUSTAINING THE FORCE
- ESTEEMING (ENHANCE QUALITY OF LIFE)

CHART 1

In order to more efficiently meet these objectives within the resources requested, the Army has, as part of a substantial Department of Defense (DoD) program, aggressively pursued efficiencies and economies.

EFFICIENCIES, ECONOMIES, AND MANAGEMENT IMPROVEMENTS

As there is a direct relationship between efficient use of resources and Army readiness, it is essential that the Army manage its resources wisely and well. The Chief of Staff of the Army has stated, "Reduction of fraud, waste and inefficiency is a fundamental mission...efficiency improves readiness." He has directed the implementation of a detailed long-term, non-cosmetic action plan - "Efficiency in the Use of Army Resources", to operate thru the chain of command.

Controlling the cost growth in major weapons systems is a primary target for improvement. We have thoroughly examined the way we manage weapons systems development and have formed a Cost Discipline Advisory Committee, whose members, selected from private industry, have reviewed our cost control procedures. They made positive recommendations that we are aggressively implementing.

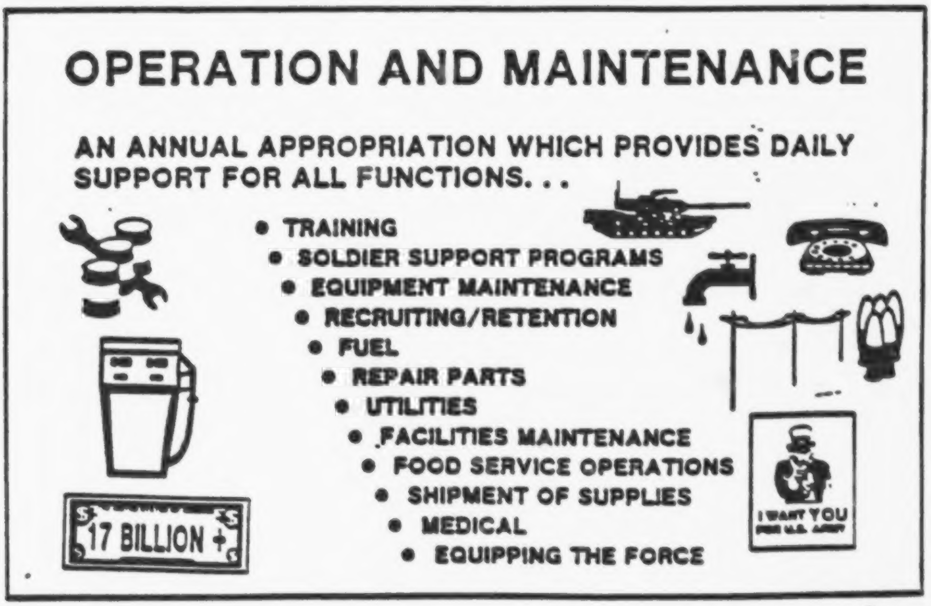
With this budget, the Army has made a comprehensive effort to identify savings and efficiencies. Auditable savings or cost avoidance have been incorporated into the Planning, Programming and Budget System. Savings have been identified in acquisition improvements, productivity enhancements, value engineering and thru audits and inspections. Many of our savings result from the good work of our soldiers and civilians. The Total Army savings and cost avoidance contained in this budget totals approximately one-half billion dollars.

This FY 1983 OMA budget request includes 34 separate initiatives which have resulted in estimated annual savings or cost avoidance of $364 million. Among these initiatives are FY 1982 reductions for savings already achieved as a result of improved supply discipline, maintenance improvements, and other marginal programs. They amount to $75 million and are identified on pages 97, 108, and 109 of the March 1981 FY 1982 Amendment. These savings, along with the audio-visual reduction in the June 1981, FY 1982 Amendment, are incorporated in the current FY 1982 estimate of this budget request and are, therefore, extended into the FY 1983 budget request. Another $289 million reported as savings represent cost avoidance initiatives where decisions were made and actions taken which will reduce future operating costs. Examples of these initiatives are consolidations of telecommunications centers, purchase of ADP equipment when cost effective, utilities savings from energy conservation measures, and contracting out the demilitarization of ammunition.

Work is underway for a better means of measuring and identifying all of the Army's Efficiencies, Economies and Management Improvement initiatives in future budget submissions. If not for these savings, we would require in this appropriation $364 million more to execute our FY 1983 program, as presented to you.

OMA IS READINESS FUNDING

Before going into the details of the FY 1982 and FY 1983 requests, I would like to share my thoughts about the importance of the OMA appropriation. The level of OMA funding is directly related to the combat readiness of the Army - our ability to deter aggression and, if necessary, engage and defeat the enemy. These dollars support the essential day-to-day activities of our units as they train their soldiers and leaders and as they operate and maintain their equipment. The linkage of this appropriation to readiness is obvious - well-trained units with operational equipment and adequate logistical depth means - "being ready". The constituency for OMA are the hundreds of unit commanders and our 780,000 soldiers who depend on us to see that they have the resources to do their work. Chart 2 lists a few of the many daily expenses required to support the Army.



17 BILLION +
I WANT YOU FOR U.S. ARMY

OPERATION AND MAINTENANCE

AN ANNUAL APPROPRIATION WHICH PROVIDES DAILY SUPPORT FOR ALL FUNCTIONS. . .

- TRAINING
- SOLDIER SUPPORT PROGRAMS
- EQUIPMENT MAINTENANCE
- RECRUITING/RETENTION
- FUEL
- REPAIR PARTS
- UTILITIES
- FACILITIES MAINTENANCE
- FOOD SERVICE OPERATIONS
- SHIPMENT OF SUPPLIES
- MEDICAL
- EQUIPPING THE FORCE

CHART 2

Since the OMA account furnishes the daily support to the active Army, it must be supportive and closely linked to decisions involving the military personnel and investment accounts. There is a very close and real-time link between the size and composition of the force and the OMA account. For example, as military strength increases or decreases, individual training, medical care, recruiting support, and certain base operating funds vary in close relationship to the strength during the same year. Although the linkage between investment accounts and OMA is equally close, there is a time lag. For example, there are funds in the FY 1983 OMA budget request to purchase fuel, repair parts, and specialized training for the M60A3 tanks which Congress authorized and appropriated two years ago and will be delivered to our units in FY 1983. However, during FY 1983, we provide the OMA funds to support the procurement actions, life cycle engineering support, initial provisioning and long lead-time training for this new equipment. The linkages between the operating, personnel and investment appropriations is critical to providing adequate and balanced support to achieve an Army that maintains near-term readiness and essential modernization.

FY 1982 CURRENT ESTIMATE

The current Fiscal Year 1982 estimate is $15.3 billion. This is $273 million greater than appropriated by the Congress. As

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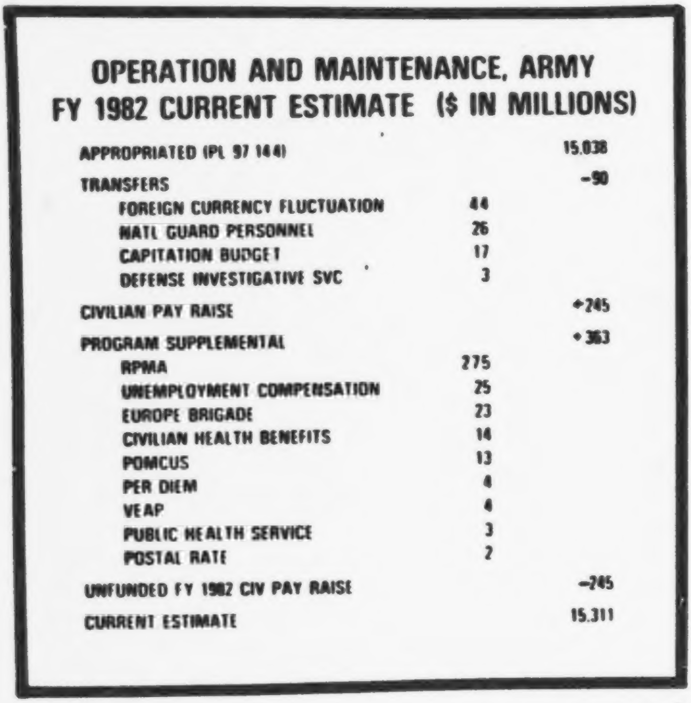
shown on Chart 3, this increase includes: $245 million for civilian pay raises that were effective October 1, 1981; $363 million for a program supplemental; and a $245 million offset to the program, since the annual pay supplemental is not being submitted until a later date.



OPERATION AND MAINTENANCE, ARMY
FY 1982 CURRENT ESTIMATE ($ IN MILLIONS)

APPROPRIATED (PL 97 144)		15,038
TRANSFERS		-90
FOREIGN CURRENCY FLUCTUATION	44	
NATL GUARD PERSONNEL	26	
CAPITATION BUDGET	17	
DEFENSE INVESTIGATIVE SVC	3	
CIVILIAN PAY RAISE		+245
PROGRAM SUPPLEMENTAL		+363
RPMA	275	
UNEMPLOYMENT COMPENSATION	25	
EUROPE BRIGADE	23	
CIVILIAN HEALTH BENEFITS	14	
POMCUS	13	
PER DIEM	4	
VEAP	4	
PUBLIC HEALTH SERVICE	3	
POSTAL RATE	2	
UNFUNDED FY 1982 CIV PAY RAISE		-245
CURRENT ESTIMATE		15,311

CHART 3

Following are the items included in the proposed program supplemental: (1) $275 million to reduce our backlog of real property maintenance; (2) $25 million to pay unemployment compensation which has been tranferred from the Department of Labor to DoD, (3) $23 million for a restoral of a brigade in Europe that was reduced in the October amendment; (4) $14 million for Civilian Health Benefits to pay the increased costs to DoD; (5) $13 million for the prepositioning of materiel configured to unit sets (POMCUS) for division set 5; and (6) other increases totaling $13 million.

FY 1983 REQUEST

The request for FY 1983 is $16.8 billion -- an increase of $1.5 billion from the current FY 1982 estimate. This increase consists of one billion in cost growth and one half billion in program (or real) growth. Cost growth is the projection of inflation dollars that must be added to accomplish what we are doing today (FY 1982)

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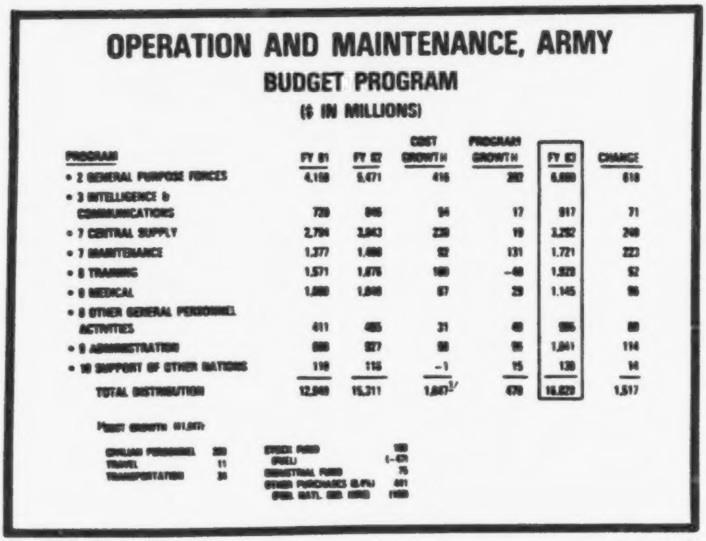
expressed in next year's (FY 1983) dollars. Program growth is the cost of doing more activities in FY 1983 than we are currently doing in FY 1982.



OPERATION AND MAINTENANCE, ARMY

BUDGET PROGRAM

($ IN MILLIONS)

PROGRAM	FY 81	FY 82	COST GROWTH	PROGRAM GROWTH	FY 83	CHANGE
• 2 GENERAL PURPOSE FORCES	4,150	5,471	416	202	6,089	618
• 3 INTELLIGENCE & COMMUNICATIONS	720	846	54	17	917	71
• 7 CENTRAL SUPPLY	2,704	3,043	230	19	3,292	249
• 7 MAINTENANCE	1,377	1,498	92	131	1,721	223
• 8 TRAINING	1,571	1,876	100	−48	1,928	52
• 8 MEDICAL	1,000	1,049	67	29	1,145	96
• 8 OTHER GENERAL PERSONNEL ACTIVITIES	411	495	31	49	575	80
• 9 ADMINISTRATION	888	927	58	56	1,041	114
• 10 SUPPORT OF OTHER NATIONS	119	116	−1	15	130	14
TOTAL DISTRIBUTION	12,940	15,311	1,047[1]	470	16,828	1,517

[1] COST GROWTH ($1,047)

CIVILIAN PERSONNEL	[illegible]	STOCK FUND	[illegible]
TRAVEL	11	(FUEL)	(−67)
TRANSPORTATION	34	INDUSTRIAL FUND	75
		OTHER PURCHASES (OPA)	481
		[illegible]	[illegible]

CHART 4

As shown on Chart 4, cost growth or inflation is a significant factor (one billion dollars) in setting the level of the OMA appropriation. If the actual inflation rates exceed the overall rate of 6.1% reflected in the budget, there will be a corresponding decrease in the program growth in order to pay the cost of inflation. For the past three years, Congress has recognized the impact of inflation and appropriated the funds requested for cost growth in a timely fashion. We ask your continued support in this area.

I will now discuss each of the Army objectives as displayed in Chart 1; how the OMA appropriation contributes to those objectives; the improvements we have made; and the remaining requirements.

MANNING THE FORCE

Recruiting. The support received from the Congress in FY 1981 and the dedication of our recruiting force resulted in one of the best recruiting years since the inception of the All Volunteer Force. The Army exceeded the FY 1981 Congressionally mandated requirement of not less than 65% non prior service (NPS) male High School Diploma graduates, and it appears we will be able to achieve this again in FY 1982. The Army essentially met, at 30.9%, the DoD established guidance for the Mental Category IV ceiling of 30% within the Army's FY 1981 accessions as we ramped to the Congressionally mandated 25% objective for FY 1982. This achievement

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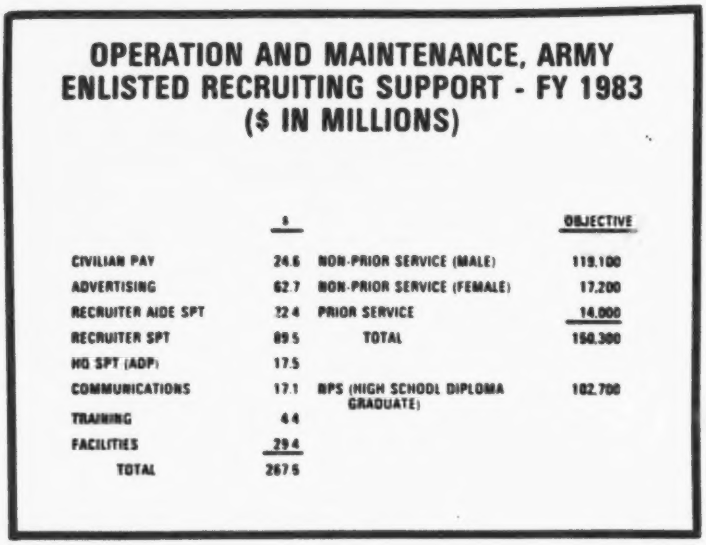
was permitted by DoD because the Congressional constraint of 25% for Mental Category IV was for the DoD total and not for each Service. We are on track in FY 1982 and expect to meet the target. The resources requested in this budget provide the necessary support to continue to meet our FY 1983 volunteer Army objective of 136,300 non-prior service and 14,000 prior service. The only program increase in resources, $4.3 million, is to offset the high cost of real estate leases needed for new recruiting stations and the relocation of existing stations.

The OMA request to support recruiting activities is $268 million as shown on Chart 5. This represents an increase of $11 million over the current FY 1982 estimate.



OPERATION AND MAINTENANCE, ARMY
ENLISTED RECRUITING SUPPORT - FY 1983
($ IN MILLIONS)

	$		OBJECTIVE
CIVILIAN PAY	24.6	NON-PRIOR SERVICE (MALE)	119,100
ADVERTISING	62.7	NON-PRIOR SERVICE (FEMALE)	17,200
RECRUITER AIDE SPT	22.4	PRIOR SERVICE	14,000
RECRUITER SPT	89.5	TOTAL	150,300
HQ SPT (ADP)	17.5		
COMMUNICATIONS	17.1	HPS (HIGH SCHOOL DIPLOMA GRADUATE)	102,700
TRAINING	4.4		
FACILITIES	29.4		
TOTAL	267.5		

CHART 5

Managing. Manning the Force is more than recruiting and retaining military members. The civilian members are an integral component of the Army. The FY 1982 civilian strength for the OMA appropriation of 252,400 includes an increase of 16,800 borrowed military manpower spaces, as we reported to you last year, to replace soldiers being returned to their units to participate in unit training activities and increase unit cohesion. Two thousand civilians are working on the MX and the Low Altitude Defense programs. Another 3,000 civilians are being used for depot maintenance, various supply programs and central procurement to increase the equipment available to the Army and increase the efficient use of procurement dollars appropriated by the Congress.

The FY 1983 OMA strength of 254,400 will continue the FY 1982 initiatives; improve the base operations support for Equipping the

BEST DOCUMENT AVAILABLE

Force and the replacement of military personnel with civilians; and for training area support, and maintenance of material by the operating forces.

The OMA appropriation provides the direct pay and benefits for 254,400 civilians. The appropriation also indirectly pays the salaries of 40,400 industrial fund employees through user purchases of goods and services from the various Army Industrial Fund activities. In total, the OMA appropriation pays 294,800 or 76% of the Army's 386,400 civilian personnel. This amount is $6.2 billion or 37% of the total OMA appropriation.

TRAINING THE FORCE

Individual Training. This request includes $1.9 billion for individual military training activities, to include the base operations of the training centers and supporting activities, conducted by the active force and $86 million for civilian training.

The FY 1983 budget submission builds on existing training programs and continues several major initiatives aimed at improving the training effectiveness of today's Army. The training base is provided additional force structure resources for expanded initial entry training for all enlisted soldiers begun in FY 1982. Although the FY 1983 Army's training load in the schools and training centers increases by approximately 9,400 over FY 1982 to a load of 101,900, there are no increases in either military or civilian manpower to support that increased training load.

The funds contained within this request support an average Senior ROTC enrollment of 80,150 at 303 host colleges and universities and provide $8.7 million to cover 3,500 additional scholarships. These scholarships will bring this program to its Congressionally authorized level of 12,000. In order to meet our high technology requirements, the Army will dedicate a number of the additional scholarships to individuals who plan to study engineering and the physical sciences. There are currently 214 scholarships dedicated to the reserve components. ROTC is on a ramp to achieve the required level of officer production (10,500) in FY 1985 to meet the total force requirements.

The revision of officer basic courses and the expanded implementation of the Combined Arms and Service Staff School at Fort Leavenworth will enhance the Officer Education and Training System. This increase amounts to approximately $32 million. Sufficient resources are provided to sustain the approved increase in officer aviator training rates to a level of 598 commissioned and 1,000 warrant officers.

Included in this budget request is an increase of $34.5 million over FY 1982 to support the requirements consistent with the integration of the new equipment and weapon systems into the Army individual training programs. This increase reflects the increased costs to operate and support these new systems during the conduct of training at the Army's schools and training centers, to include the fielding of New Equipment Training Teams.

BEST DOCUMENT AVAILABLE

The request contains approximately $121 million for training development activities, which represents a $20 million increase over the FY 1982 program. Training development prescribes training programs, support materials, devices, equipment, ammunition, ranges, targets, facilities and training environment to attain performance levels required to meet training objectives. A major portion of the increase supports training development requirements linked to the introduction of new weapon systems and equipment into the Army inventory, recent changes in the Army's divisional structure and the resultant changes in tactical employment concepts.

Limited resources supporting plans for the mobililization of the training base are also contained in this request. $25 million for individual clothing and equipment, engineer facility plans and the employment of mobilization training specialists are included.

The Army is currently reviewing the training base manpower posture in an attempt to further verify mission requirements and determine shortfalls. Once these shortfalls are identified, affordability options will be developed by the Army staff to alleviate the shortfall.

Civilian Training. This request contains $86 million for civilian personnel training programs. The largest single element, $68 million, is the career intern program in which we recruit, pay, and train civilians to fill positions in highly specialized occupations. This program is essential to develop civilian professionals.

Unit Training. We have budgeted $1.2 billion, exclusive of the National Training Center (NTC) and the Joint Chiefs of Staff (JCS) exercises mentioned below, to support realistic, mission-oriented unit training. These funds train not only our 16 active component divisions but also hundreds of smaller combat and support units. These funds sustain unit proficiency and training effectiveness.

A high priority is being given to the National Training Center located at Fort Irwin, California. During FY 1983, twenty heavy battalion task forces will conduct realistic training that cannot be duplicated elsewhere in the United States. The total cost of the Center in FY 1983 will be $113 million, of which $69 million is Operation and Maintenance, Army.

The Joint Chiefs of Staff (JCS) Exercise Program is a visible highlight of our training program in which Army units both learn and demonstrate their capabilities. The FY 1983 funding for this program is $77 million. The Army will participate in 8 JCS-directed and 32 coordinated exercises. The increase is due primarily to a mobilization exercise and inclusion of a major biennial exercise in Alaska.

The active Army's total flying hour program for FY 1983 is 1,264,276 flying hours at a total OMA cost (fuel and repair parts) of $306 million and includes both individual pilot and unit training. This program reflects an increase of 24,424 hours and is adequate to meet our FY 1983 readiness requirements.

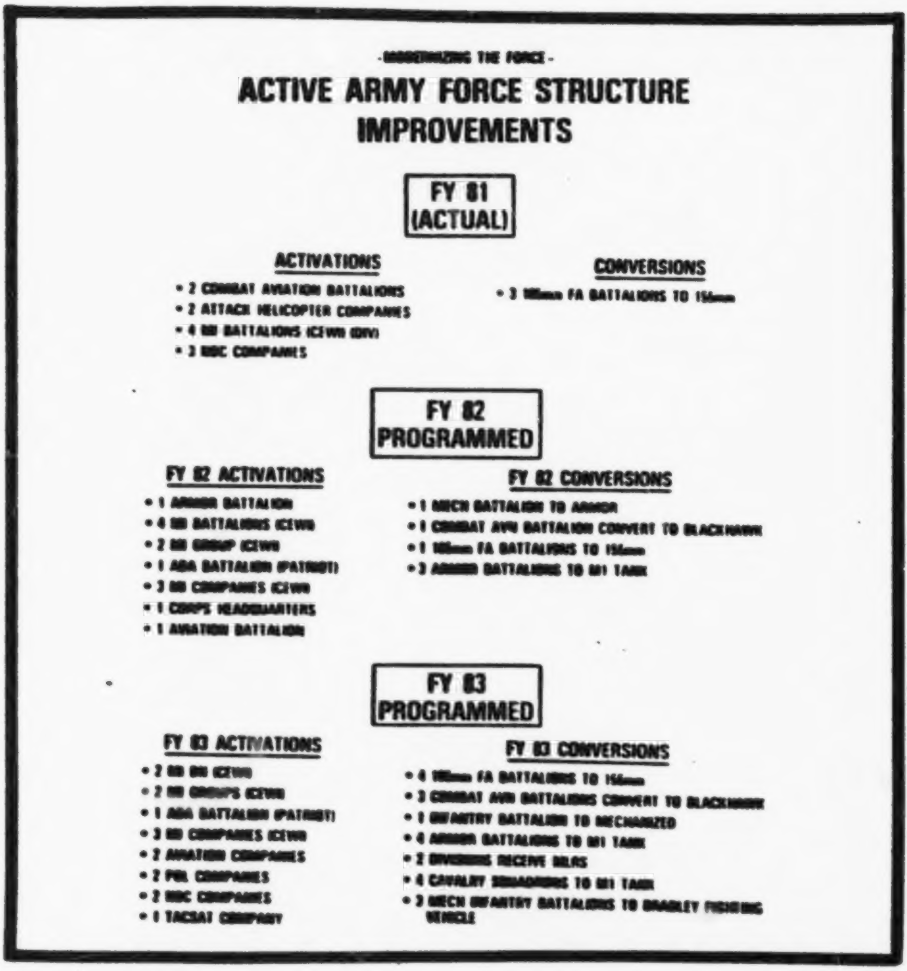
The active units are giving expanded support to Reserve Component (RC) units through the Affiliation, Partnership, and

CAPSTONE Programs. These programs improve the training and readiness that subsequently insure the RC units' ability to mobilize, deploy and accomplish their wartime missions by close association with and assistance from active units. During FY 1983, increased funding for all three programs is requested. By the end of FY 1983 under Affiliation, active units will assist approximately 500 RC units -- an increase of approximately 200 RC units. In addition, there are more full time manning personnel assigned to RC units to assist in upgrading training and logistical support functions.

Overall, this budget provides for increased support of our individual and unit training programs. However, the training base still requires additional manpower, both military and civilian.

MODERNIZING THE FORCE

Structure. The 24 Division Force (16 active and 8 reserve component) is the center of the basic force supported by the Active, Guard, and Reserve O&M Appropriations. The FY 1982 Amendment in October 1981, identified the 7th Infantry Division and the 4th Brigade, 4th Infantry Division for partial or complete elimination from the Army's force structure. The proposed FY 1982 program supplemental and the FY 1983 budget restore this structure. Within this division structure, we continue to make internal improvements to better meet the current and projected threats. This request includes numerous force structure changes designed to improve our capability to meet the threats. The major improvements are shown on the following chart.



-MODERNIZING THE FORCE-

ACTIVE ARMY FORCE STRUCTURE IMPROVEMENTS

FY 81 (ACTUAL)

ACTIVATIONS

- 2 COMBAT AVIATION BATTALIONS
- 2 ATTACK HELICOPTER COMPANIES
- 4 MI BATTALIONS (CEWI) (DIV)
- 3 NBC COMPANIES

CONVERSIONS

- 3 105mm FA BATTALIONS TO 155mm

FY 82 PROGRAMMED

FY 82 ACTIVATIONS

- 1 ARMOR BATTALION
- 4 MI BATTALIONS (CEWI)
- 2 MI GROUP (CEWI)
- 1 ADA BATTALION (PATRIOT)
- 3 MI COMPANIES (CEWI)
- 1 CORPS HEADQUARTERS
- 1 AVIATION BATTALION

FY 82 CONVERSIONS

- 1 MECH BATTALION TO ARMOR
- 1 COMBAT AVN BATTALION CONVERT TO BLACKHAWK
- 1 105mm FA BATTALIONS TO 155mm
- 3 ARMOR BATTALIONS TO M1 TANK

FY 83 PROGRAMMED

FY 83 ACTIVATIONS

- 2 MI BN (CEWI)
- 2 MI GROUPS (CEWI)
- 1 ADA BATTALION (PATRIOT)
- 3 MI COMPANIES (CEWI)
- 2 AVIATION COMPANIES
- 2 POL COMPANIES
- 2 NBC COMPANIES
- 1 TACSAT COMPANY

FY 83 CONVERSIONS

- 4 105mm FA BATTALIONS TO 155mm
- 3 COMBAT AVN BATTALIONS CONVERT TO BLACKHAWK
- 1 INFANTRY BATTALION TO MECHANIZED
- 4 ARMOR BATTALIONS TO M1 TANK
- 2 DIVISIONS RECEIVE MLRS
- 4 CAVALRY SQUADRONS TO M1 TANK
- 3 MECH INFANTRY BATTALIONS TO BRADLEY FIGHTING VEHICLE

CHART 6

During FY 1981, the Army began a major initiative called the high technology test bed (HTTB) using a standard infantry division -- the 9th Infantry Division at Ft. Lewis, Washington -- as a base. The activities associated with the HTTB focus on developing a light division designed to improve our capability for rapid deployment and exploit technological opportunities. This new division should meet our requirement for a lean, hard-hitting force that can be rapidly deployed worldwide. The FY 1982 estimate includes $18 million to develop this project, and as the concept matures and expanded tests are conducted utilizing additional hardware, the FY 1983 request is for $43 million.

Equipment. The Equipping the Force program as it is known in the OMA appropriation supports the Army's Force Modernization Program.

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It provides the funds to support the new or modernized equipment approved by Congress for procurement several years ago. There is generally a lag of about two years between the time that the equipment is procured and the time it is fielded. The program represents the net change in operating costs between the old and new systems.

These funds support the operating and support life cycle cost of the new equipment from the initial production contract through delivery, fielding and operation to the salvage yard after its useful life. Funds also provide for the disposition of most of the replaced equipment directly or through depot rebuild to other Active, Guard, or Reserve units, or into War Reserves. Given the equipment shortages within the total Army, few systems completely leave the Army.

Over the past three years, the OMA appropriation has experienced rapid growth in the Equipping the Force program from a total of $420 million for 42 systems in FY 1981 to $1.44 billion for 153 systems in FY 1983 as depicted by the graphs on Chart 7.

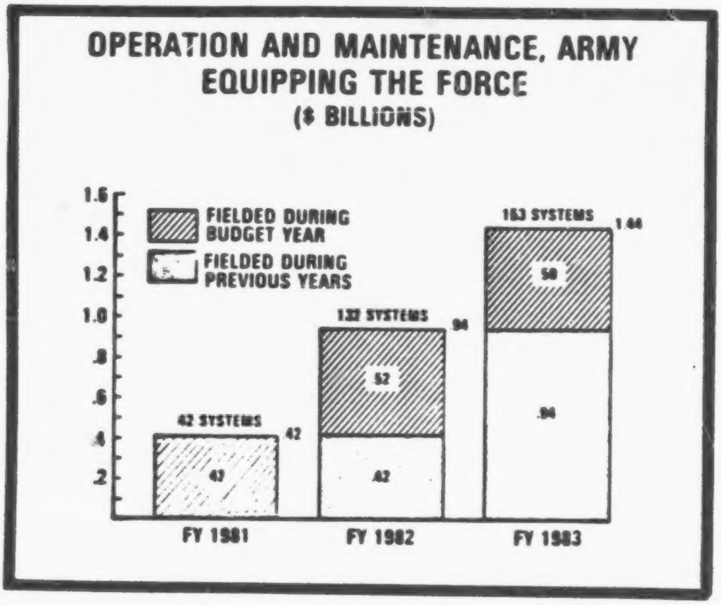

CHART 7

The Army has chosen to program and budget its equipment modernization funds in this manner in an effort to define all the costs of force modernization and, through this visibility, better manage and control these increased resources. If the Army did not highlight the program in this manner, only the cost associated with

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support of deliveries in the particular budget year would have visibility as indicated by the lined areas. Note the relatively stable program growth of about $500 million which supports the equipment being fielded during the budget year.

This rapid growth in the total program reflects four distinct factors. The first factor is the cumulative nature of the funding program highlighted by the shaded areas on Chart 7. Total funds being requested for FY 1983 provide for: the one-time and recurring support of the new or modernized equipment actually being delivered to the field in FY 1983; and all the recurring support for equipment of the same type delivered in previous years. One-time support consists primarily of transportation to deliver the item; initial or increased stockage of repair parts at the various maintenance echelons; development of new training courses and publications for equipment operators and mechanics; minor modifications to existing support facilities; and costs associated with the displacement of the systems being replaced. Recurring support consists primarily of replenishment repair parts and maintenance operations at the unit and installation level; fuel; training of new equipment operators and mechanics; and supply depot and maintenance depot operations.

A good example of the cumulative nature of the program is the M60A3 Tank. The FY 1983 request includes $110 million for this system. Of this total, 15% will be used to provide one-time support and 10% for recurring support of the 446 tanks projected to be delivered to field units during FY 1983. The remaining 75% will provide the recurring support for 1,961 tanks projected to be fielded up through the end of FY 1982. Of course, this percentage will shift for each different system depending on how many items of a particular system were delivered prior to FY 1983. Generally speaking, however, substantial quantities of the 153 different systems being supported by this request were fielded prior to FY 1983.

The closely related second factor is the overall increase to 153 in the number of systems being introduced and centrally managed at DA Headquarters.

The third factor concerns any increased operating cost of the new equipment over that which it replaces. For example, it costs about $23 thousand, or 36%, a year more to operate and maintain a Bradley Fighting Vehicle in the field than the M113 Armored Personnel Carrier which it replaces.

The fourth factor is that the program includes new systems, designed and introduced to meet a new threat or permit the Army to accomplish its mission more effectively, which do not replace an older system. For example, the Multiple Launch Rocket System significantly increases the Army's combat capability but does not replace an older system of the same type.

To assist the Army management effort, a significant innovation has been added to improve control and visibility over the execution process and to assist in future programing and budgeting activities. Starting in FY 1982, the major commands, or MACOMs are required to report their financial spending specifically for Equipping the Force issues. This feedback will permit necessary reallocation of funds among systems and MACOMs and promote improved cost estimating for future budgets. This requirement is the forerunner of improved Army accounting systems now under development which will capture the full cost of weapons and equipment systems as well as new or modified organizations being introduced under the Division 86/Army 90 concept.

The key to the Army's cost estimating process for this program is the Army Modernization Information Memorandum, or AMIM, a highly formalized and disciplined reference source published each year which captures all pertinent data and information needed to field and operate successfully the new or modernized systems. It provides information regarding equipment description; impact on organization and personnel; training and doctrine; supply maintenance requirements; facilities; and fielding and operating support costs. It also provides the MACOMs with the expected quantities of systems each will receive. Production schedule uncertainties, with the attendant modifications in fielding plans, impact on estimated support requirements and necessitate periodic review and reallocation of resources even during the year of budget execution.

Based on the AMIM, the MACOMs zero base estimate their total funding requirements by each individual type system. They then deduct the funding already in the program for systems being displaced to determine the net increased requirement. These requirements are subsequently subjected to a Department of the Army (DA) review board attended by key DA analysts and MACOM representatives. Estimates are finalized through this arduous process and, subsequently, reflected in the Army program and budget. This is a yearly process to insure current budget estimates accurately reflect Army requirements.

MOBILIZING THE FORCE

Our FY 1983 request continues many of the initiatives begun during FY 1982. Although positive steps are being taken, there are substantial shortfalls in the equipment, clothing, and facilities needed upon mobilization which will take years to completely overcome. A number of other issues appear throughout the FY 1983 request which fall under the Mobilization umbrella.

Several specific examples in which the OMA appropriation supports mobilization are:

$147 million is requested to maintain our reserve industrial plants and equipment and to perform industrial preparedness planning.

$3 million is requested to operate a joint Selective Service System/ Military Enlistment Processing Command computer facility. This became even more essential after the President's recent decision to continue draft registration.

$7 million is requested to prepare standardized plans, develop mobilization standards of construction, and develop installation support plans at various mobilization sites so that construction lead-time will be substantially reduced in the event of mobilization.

$20 million is requested for individual clothing and equipment required for mobilization training base expansion. These funds will help move the Army toward the capability to outfit 334,000 trainees during the first 90 days of mobilization.

$6 million is requested to continue funding of the Army's biennial mobilization exercise whereby the continued analysis and documentation of mobilization and deployment issues is facilitated.

Not included in the FY 1983 budget are funds for the correction of many serious shortfalls. Stockage of non-perishable medical material, equipment outloading materials for mobilized reserve component units, and major items for training base expansion are not funded in the FY 1983 budget. Future budget submissions will address these significant weaknesses.

DEPLOYING THE FORCE

The appropriation supports two major categories for our overseas deploying forces: stockage of war reserves and the POMCUS program. Of course, the various training exercises, such as the JCS program and those conducted at the National Training Center, contribute to the ability of the Army's units to deploy from their stateside location to an overseas environment or to another stateside site where the overseas procedures for issuing materiel can be followed.

The shipment of war reserve stocks continues at a high level although shortages of certain items of equipment and a lack of port and, in the case of ammunition, storage capacity preclude having as many days of supply on hand as we need.

The POMCUS program continues to get emphasis. The percent of fill of materiel for Division Sets (DS) 1-4 is increasing. It is critical that the Army be allowed to continue placing additional sets in Europe. Although the FY 1982 Appropriations Bill reduced the funds for DS-5 and precluded the Army from shipping equipment, we have asked for a restoration of the $12.5 million in the FY 1982 program supplemental accompanying the President's Budget. There is $16.1 million in the FY 1983 request for DS-5 and $15.9 million for DS-6.

SUSTAINING THE FORCE

The heart of the Army sustainability program is the logistics community. Not only do the day-to-day supply systems have to be operating effectively to get the supplies from the production plants into the hands of consumer, but also logistics systems and facilities have to be configured for rapid expansion in case of a conflict.

The Army Supply System has, for the past several years, been the subject of numerous audits on what it is not doing and how it should be run more efficiently. As a result of General Accounting

Office, Defense Audit Service and Army Audit Agency reports which imply that the Army Supply System is mismanaged and inefficient, the OMA appropriation has received numerous reductions. While the Army had disagreed with some of these findings, others were valid. To demonstrate our positive reaction toward greater efficiency, the following is a rather detailed discussion of what the Army has done and is planning to do to increase the efficiency of our supply system. I hope that it will put your minds more at ease about our ability to handle our supply system more efficiently.

The FY 1983 budget submission includes $3.3 billion to support a worldwide Army Supply System, which directly employs over 8,000 military personnel and 67,000 civilians. This complex system is a vital component of readiness and performs the majority of Army materiel functions including research and development; procurement and production; product improvement; human factor engineering; new equipment training; scientific and technical intelligence production; and storage, distribution, maintenance, demilitarization, and disposal.

The Army fully recognizes the responsibility to ensure these functions are performed in the most efficient and economical manner possible, and maximum value is received from the substantial resources which Congress has provided. Therefore, we are acutely sensitive to identifying areas having potential for improvement. Each recommendation is and will continue to be conscientiously and intensively evaluated and implemented, wherever feasible.

We have recently made progress toward this end, and we have every intention of demonstrating even greater improvement during the months ahead.

Among our more significant initiatives is a projected savings of $30 million over the next five years in the resources required to meet repair parts requirements. This is documented in the FY 1983 budget submission and entails aggressive and innovative management improvements in determining requirements. Order-ship-times (duration of period between requisitioning and receipt) should be substantially reduced. Logistic activities will maintain more streamlined inventories due to the implementation of a review procedure to determine the essentiality of specific inventory items.

Another major effort having worldwide implications is an ongoing program which is designed to more effectively manage excess repair parts. By reducing the time that we keep excess parts at a location from 3 years to 1, we have dramatically increased the availability of valuable assets for redistribution. In the US Army, Europe we have extended the screening period for excess items in order to provide a greater opportunity for redistribution within Europe, thus avoiding unnecessary and costly returns to the United States. This has resulted in the redistribution of nearly $12 million of parts annually; increased supply responsiveness, and associated cost avoidances.

At the same time, we have initiated a number of management actions to more intensively monitor the return of expensive items that can be repaired. The objective is to ensure that supported units are returning such items in a timely manner so that they may be repaired and returned to the supply system. As we increase return rates, we can reduce the amount of new repair parts that we buy.

The establishment of an air supply system for repair parts destined for Europe, Korea, Alaska, and Hawaii complements the preceding initiatives and has significantly reduced the resources required to support our overseas forces. The time to get an air transported part to Europe has already declined from 61 to 25 days, resulting in the increased readiness of our forward deployed forces and a net decrease in costs. Users get directly shipped supplies far more quickly than in the past and, therefore, they do not have to have as many on the shelf. This in turn reduces the required stockage level for the entire Army supply system. Increased soldier confidence is already apparent and should discourage the long-standing undesirable practice of unauthorized stockpiling as a hedge against supply inefficiency.

Another area of emphasis at the highest levels is the more efficient and innovative use of the resources, both materiel and human, which have already been provided. A program which has been highly successful is the Resource Self-Help Affordability Planning Effort (RESHAPE) under the administration of the Army's Materiel Development and Readiness Command (DARCOM). Designed as a practical means of alleviating that command's recognized manpower shortfall of some 23,000 personnel authorizations, it is an excellent example of the Army helping itself. The program includes the use of overtime, temporary employees, capital investment, and innovative pilot initiatives such as profit sharing and other modern business applications. Results thus far have been most encouraging. Participating DARCOM installations exceeded productivity goals in FY 1981 by nearly 10 percent.

Other initiatives include: transferring clothing sales stores to the Army and Air Force Exchange System, thus releasing 40 military and 260 civilian authorizations for more military essential functions; contracting selected commissary operations for a 9 percent or 925 reduction in required manyears; and improving accountability procedures for war stock reserves and material provided to contractors.

The Army is seriously committed to increasing and sustaining the momentum of these and other programs, which are designed to improve the management of our materiel resources substantially.

Other logistics programs which directly contribute to the sustainment of the force are the depot maintenance hardware program, chemical and conventional ammunition demilitarization, and the various ADP systems which have been and are being developed to support the logistics effort.

The Army is aggressively pursuing methods by which to reduce the amount of unserviceable/obsolete munitions in the inventory. One of these initiatives is to determine the feasibility of selling conventional ammunition to private contractors for demilitarization in their plants. The Army hopes to achieve a cost avoidance of $10 million per year as a result of this program. Additionally, DARCOM is currently conducting an in-depth analysis of the Army's demilitarization eligible stocks to determine the most cost-effective manner of reducing those stocks and thereby gaining storage space for items currently in demand.

Overall depot maintenance requirements do not greatly increase; however, there is a substantial increase in the overhaul requirement for equipment which is coming into the depots as part of the Army's Force Moderization program.

Despite this increase, the backlog remains at zero for the second year in a row. The additional civilians added during FY 1981 and FY 1982 and carried into FY 1983 increased our in-house capability. The Army has the added flexibility of going out on contract to get selected items of equipment overhauled or repaired.

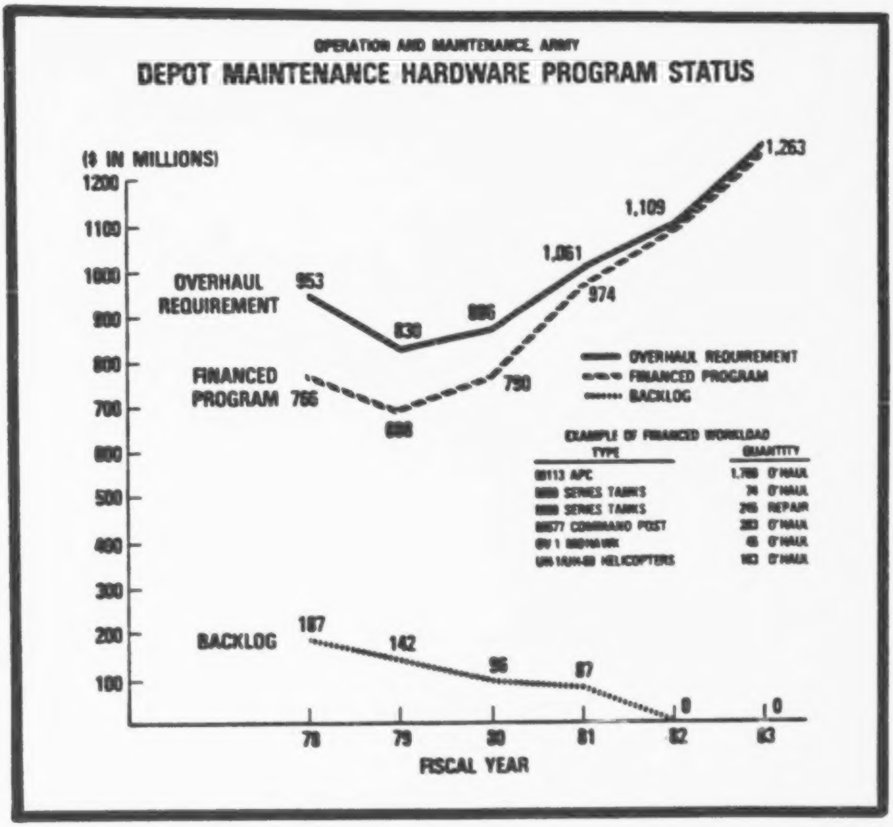

CHART 8

The Army's objective is to reduce the expenditure of money for retaining demilitarization eligible stocks in the inventory and

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make space available for new stocks being procured. DARCOM will develop a plan to reduce stocks eligible for demilitarization to a management level. Total length of this program is dependent upon availability of manpower compared to other high priority programs.

Although no substantial increase in funds appears in the various logistics ADP systems, there is an on-going effort to continue the programs keyed to improving the logistics systems. The bulk of the dollar increases for various ADP systems, personnel as well as logistics, is categorized under other objectives such as Modernizing and Manning.

ESTEEMING

The esteeming objective encompasses a portion of the Quality-of-Life Issues which have become so important to successful retention of our soldiers. Included are medical care, the repair and maintenance of our real property; the enhancement of our food service program; community, morale, welfare and recreation activities; and the various education programs earmarked for our military personnel.

The medical care program remains relatively stable with regard to its total workload. However, there is a slight increase in the manpower related portion of the program. The replacement of military personnel with civilians as well as an increase in the number of civilians performing ancillary services for the doctors causes some program growth. This additional manpower will enhance the quality of medical care by releasing doctors from administrative functions.

The FY 1983 budget contains $1.2 billion for the maintenance of our active facilities. As can be seen from Chart 9, there is an increase in the funding of this program between FY 1981 and FY 1983 of $219 million. FY 1983 shows a decrease in maintenance and repair of $318 million over the current FY 1982 estimate. The decrease in FY 1983 is attributed to not extending the FY 1982 $119 million Congressional increases and the FY 1982 $275 million supplemental for backlog into FY 1983. For the second year in a row, our backlog of Maintenance and Repair, or BMAR, decreases from its previous year's level. This decrease occurs, in large measure, by the support the Army has continued to receive from the Congress.

The Army has long been concerned about its facilities and the rapid deterioration resulting from lack of proper maintenance and repair. The poor condition of our facilities, especially in the overseas areas, has caused many highly trained soldiers to express deep concern, impacting on their attitude toward continuing in the service and also impacting on the readiness of the forces. That adverse attitude of the soldier is now being turned around because of the increased funding programs: in FY 1981 that just ended, $.9 billion; the FY 1982 program, $1.5 billion; and in FY 1983, $1.2 billion.

The soldiers see major improvements in progress and no longer hear promises that things are soon to be fixed. Their barracks are being repaired (windows, doors, floors, latrines being fixed so they are usable, showers being repaired and the heating systems beginning to work); the maintenance shops are being repaired so that the soldiers can work on their unit vehicles and equipment in reasonable comfort and safety; recreational centers are being repaired, and in some cases are finished. A repaired Recreation Center in Kaiserslautern Community, Germany was opened on October 31, 1981 and has received positive comments from soldiers such as "the Greatest". Utility systems are undergoing repair, and hospitals and medical facilities are in process of being repaired, or plans are on the drawing board for their repair.

Although significant visible improvements are in progress, we still have a long way to go to bring all our facilities to a decent standard and then to continue to maintain them. Since it sends clear signals of resolve to potential adversaries, visible improvements to Army facilities, especially overseas, contribute to strategic deterrence. I ask for your continued support in this program which is so vital to the living and working conditions of our dedicated military and civilian workforce.

The following chart shows how much we have funded, the backlog growth and the composition of the backlog -- for the Army as well as for the OMA Appropriation.

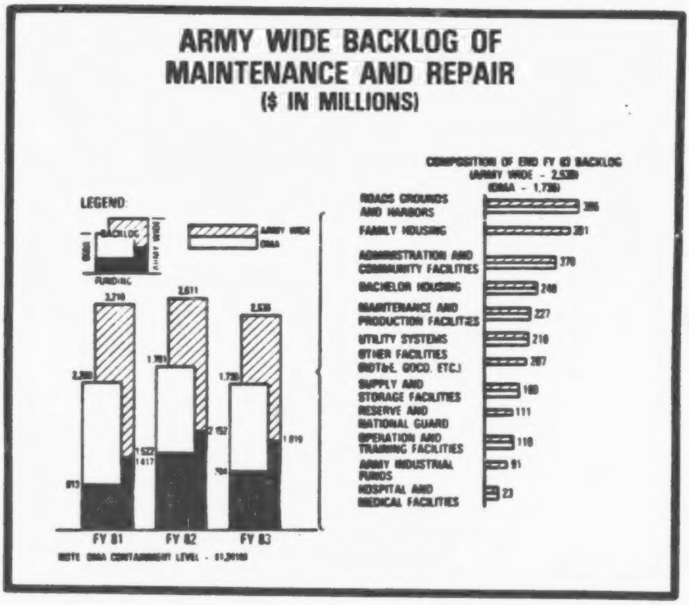

CHART 9

Closely aligned with the improvements in the living and working conditions of our soldiers is the enhancement of the Army Food Service Program. This program seeks to insure high troop morale by

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providing acceptable, well-prepared meals served in a pleasant environment. One of the major new ongoing initiatives to improve dining facility operations is the development of the Army Food Management Information System (AFMIS). The system provides for an automated headcount capability which will use the new machine readable military identification card to control access to dining facilities and to provide positive identification as to the subsistence entitlement of each member. AFMIS is expected to generate savings in the FY 1985/86 time frame in subsistence dollars through improved headcount procedures. In addition, it will allow the Army to return most military headcounters to normal mission duties, thus permitting more effective use of over 1,500 workyears of military effort at the unit level.

Community morale, welfare and recreation activities are essential in that they foster soldier readiness and commitment to Service. Due to budget constraints, these services are maintained close to the previous years level, allowing little improvement. Of particular concern are adequate and safe child care facilities and other family support activities needed for soldiers and their families. In FY 1983, $180 million is requested to continue, without any real growth increase, the operation and maintenance of over 4,600 community morale, welfare and recreation activities.

The education programs offered by the Army for its members are important both as a recruiting attraction as well as an incentive for military members to increase their educational achievement levels. Army continuing education programs directly support soldier readiness and retention. On-duty education helps soldiers achieve skills they need for successful completion of training, enhances professional development and improves job performance. Off-duty voluntary education assists soldiers in fulfilling their personal goals for educational growth and improving their capability in the Service. The OMA appropriation requests $157.3 million for educational programs: $18.1 million for the Basic Skills Education Program; $27.9 million for tuition assistance; $85.8 million for education center operations which includes counselor salaries, learning center support and administrative/management support. Included in the Army Continuing Education System (ACES) budget request is $25.5 million for earned entitlements under the Veterans Education Assistance Program (VEAP). The main reasons for the FY 1983 growth include: increased participation in VEAP and payment of VEAP obligations occurring in previous years; continuation of the MOS-specific basic skills development to relate instruction directly to military job performance; operation of learning centers to integrate installation and community education and training activities for soldier development and unit readiness; and application of educational technology to ACES programs and services. If the Army is to carry out its responsibilities and promises to soldiers and develop programs that will be needed in the mid 1980's, these funds are essential.

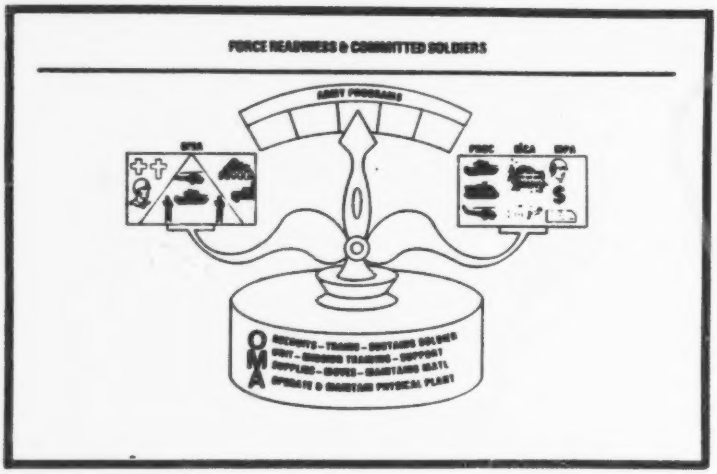
SUMMARY

In this statement, I have shown how the OMA appropriation supports Army readiness through its seven budget objectives. The appropriation helps man the force by recruiting and retaining the military and civilian manpower the Army needs; trains these personnel to perform their respective missions; furnishes the operating and support tail to the Army's Modernization Program; provides resources to prepare Army facilities for mobilization; expands the quantity of materiel (equipment as well as supplies/repair parts) available for forces deploying from the United States; increases the stockage levels for ammunition and other prepositioned war reserves in order to sustain our forces; supports, at an increased level, several programs such as medical, education and real property repair which improve the quality of life (esteeming) of the military and civilian workforce located throughout the world. Within its requested FY 1983 resources, the Army will maintain its near-term readiness, and at the same time, the appropriation is supporting the longer-term equipment modernization program. This balance is maintained by the following specific improvements:

- Equipping the Force
- Real Property Maintenance and Repair
- Individual and Unit Training
- Civilian Manpower
- Communications Support
- Sustainability (War Reserve and POMCUS)
- Depot Maintenance
- Education Programs

Despite these improvements, there are two major areas in which additional resources could be effectively used: the training base and real property maintenance. As mentioned earlier, our training base, to include the base operations support, needs additional resources to better train and support our new soldiers. The slight decrease (2%) in our backlog of real property maintenance is targeted for Europe. The backlog in the rest of the Army's facilities in the United States and the Pacific is increasing. Additional resources could be used in this area to further reduce our backlog towards the containment level of $1.241 billion.

The Army asks your assistance to maintain the improvement we have made in the appropriation's support of the Army's near-term force readiness and soldier support and longer-term sustainability goals.


FORCE READINESS & COMMITTED SOLDIERS
ARMY PROGRAMS
PROC
MCA
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RECRUITS - TRAINS - SUSTAINS SOLDIERS
UNIT - MISSION TRAINING - SUPPORT
SUPPLIES - MOVES - MAINTAINS MATL
OPERATE & MAINTAIN PHYSICAL PLANT

CHART 10

Senator **HUMPHREY**. Senator Stennis, do you wish to ask questions?

Senator **STENNIS**. No; let me follow you two gentlemen.

BACKLOG OF MAINTENANCE

Senator **HUMPHREY**. General, you seem to put some emphasis on explaining why, for instance, the backlog of maintenance facilities is growing. I understand the relationship between procurement and the O. & M. account and yet it looks to me at first glance as though—as happened in the 1970's so often—O. & M. is getting short shrifted here in favor of procurement, and this matter of a growing backlog of maintenance is very disturbing to me.

I am glad to see that it does not include Europe, because I was in Germany over the Christmas recess and was appalled at the condition of the Army facilities there. Nevertheless, I am concerned about this growing backlog of maintenance. How can that be justified? In the long run it is going to cost us more to repair these facilities by having waited than if we had gone forward before now.

General **PEIXOTTO**. I certainy agree with you about the conditions in Germany. Six months ago I returned from a tour of duty in Germany and feel very strongly about the need to fix facilities there, as well as some intolerable conditions in Korea that our soldiers are living in.

Now, to look at this in perspective, if you go back to fiscal year 1981 we had about $900 million for the maintenance and repair of real property. Fiscal year 1982 brought us an increase of over one-half of a billion dollars. I am quick to say that that number includes $275 million contained in a supplemental; so, if one assumes the Congress will approve the supplemental, then that is a good number I certainly hope is true.

That brings us in fiscal year 1982 to a level of $1.5 billion. The 1983 total level is $1.2 billion, which is substantially ahead of fiscal year 1981. I think it shows our clear intent to continue to put emphasis in the repair and maintenance area; however, as we put this budget together, we realized, unlike the press would have you be-

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lieve, there is not an unlimited budget for the Department of Defense. Continued growth in this one area was not possible when the final decisions were made and we tried to achieve a balance. We are fixing the worst conditions. There is no question about that, and we continue to place high priority on this area.

Senator HUMPHREY. It seems to me the matter of backlog of maintenance is not only the spending side of it but it is also the other side of the coin, which is how fast the facilities are decaying and are in need of repair.

What would a chart look like, for instance, on backlog of maintenance over the last several years? Has it been growing steadily? What is it projected to be in the next couple of years?

General PEIXOTTO. Over the last several years it has been growing significantly. I believe that we go back to 1978 when the problem was first recognized by the Congress; a cap was put on at the 1978 level and we were just unable to stay within that cap. The backlog of maintenance and repair, or BMAR continued to grow to—I think it hit its peak in about fiscal year 1981—$2.2 billion.

Now we are projecting in fiscal year 1982 that the BMAR will go down to $1.8 billion and in fiscal year 1983 we project it will go down to $1.7 billion. And, at the present time it is projected to approach zero in our 5-year projection. I won't say it will reach zero, because it is dependent on funding in the last couple of years of the 5-year defense plan. It is my experience that you never see all that money.

But, it is definitely on a descending plane.

Senator HUMPHREY. How about depot maintenance in that same regard?

General PEIXOTTO. I am very pleased to say that in this budget, depot maintenance is adequately funded to bring the backlog down to zero in fiscal year 1983 and basically we have pretty good projections in the outyears.

SPARE PARTS

Senator HUMPHREY. How about the need for spare parts; do we have figures for that?

General PEIXOTTO. I will answer that briefly and then I will ask General Eicher to go into more detail.

I look at repair parts from two points of view: One, we have the issue of repair parts to operate the Army in peacetime. We have to a fair degree, a level of funding for repair parts so our training and today's readiness can be achieved.

There is a deeper problem, however, and that is the repair parts required for a wartime level of activity. We have been building up our stock fund; for example, in this year's budget we are asking for $222 million in the Army's stock fund. I realize you don't review that in this subcommittee, but a large percentage of that appropriation will go toward buying the repair parts necessary to put on the warehouse shelf that will be needed in wartime.

Of course, the rates of operation of our tanks and aircraft in peacetime are nowhere near that of wartime, but we do have a rather serious shortage in that area and also in what we call secondary parts: Engines and things like that.

With that, I would like to ask General Eicher if he has anything to add.

General **Eicher**. Prior to October 1981, sir, we were developing our stockage for repair parts on peacetime demand rates. As you know, in a wartime environment different parts would be required and even the same parts that would be required would be needed at a different rate or usage factor.

Working with TRADOC, the Army has developed what we call combat-prescribed load lists. These have been funded out to 1987. We have requested funding to the tune of $57 million that would give us the repair parts at the unit and also at the direct-support level to take care of our requirements as we see them today in the combat environment.

We ask, for example, this year for $7.9 million in 1982 and we have that funding coming through. We are also thinking about this same type of thing, and more to the point, stockage for combat environment for our Reserve components. For those units that will be deployed in the D-plus-60 timeframe, we have put money into the Reserve component stockage program beginning in fiscal year 1985.

So, the situation has improved, sir. We are honing in on exactly those repair parts that are needed not only in the peacetime environment but also in the combat environment, hopefully.

UNIT TRAINING

Senator **Humphrey**. How about the area of unit training, is that getting better or worse or what?

General **Peixotto**. Unit training, again in the perspective of going from 1981 to fiscal year 1982, received a significant increase. We are already up on an increased level of funding. We don't have all that we truly need in unit training, but I would say the Army is now enjoying a higher level of unit training than we have enjoyed in earlier years.

However, to raise the unit training level we have to do several things: We need to improve our training areas, particularly in Europe. There is limited real estate available on which we can train our soldiers. We have the major training areas where the troops go for lengthy periods of time, and then within the area of the community we have what we call the local training area.

This budget and future budgets are putting a considerable amount of money into these local training areas to enhance their use to bring realistic training to soldiers, using the very latest in training devices and simulators and so on.

As such, we have a similar program going on in the States. I think you are familiar with the multiple integrated laser engagement system, or MILES, which is really revolutionizing the training of the infantryman. He is realizing the importance of creeping and crawling, cover and concealment, and so on; because, they go through engagements using the MILES system, and they are declared dead when they don't use their training.

We have to improve our ranges. Our ranges are not adequate for the modern weapons systems that we are bringing on line. So our great emphasis right now, before we take another step increase in unit training is to take care of training facilities.

Senator HUMPHREY. Senator Levin.

BIG TICKET PROCUREMENT ITEMS

Senator LEVIN. General Peixotto, I guess this committee is keenly involved in the issue of how much we are going to invest in so-called big ticket procurement items and how much we are going to put into the readiness items. It is something we are very much concerned about.

When we look at the big picture for the Department of Defense we see major shifts toward the big procurement items on a percentage basis of the total defense budget. For the first time we see actually more money spent on procurement than we do on readiness, starting with years 1982 and 1983, which is a significant shift from prior years.

Now, we have felt that we have shorted the readiness items over the past year. Others feel that we have shorted the procurement items. Many think we have shorted both items.

I guess the real question is, What kind of proportion do we feel should be committed to each of these sectors? Just looking at the Army, in 1983 there was real growth in operation and maintenance of 3 percent in the 1983 Army budget, while the real growth in procurement is 18 percent.

Now, there is an implication there that we have shorted the procurement accounts significantly more than we have shorted readiness over the past year. That is an implication I for one do not accept. In any event, that is the broad picture, 3-percent real growth in O. & M. accounts in the Army and 18-percent real growth in procurement.

What do the O. &. M. accounts look like in comparison to the procurement accounts for the years 1984 to 1987? Do you happen to have those figures for us in the Army?

General PEIXOTTO. Yet, sir, we do. Percentagewise, would probably be the best way to talk about it. In this fiscal year 1983 budget we are presenting, O. & M. is about 31 percent of the total Army budget.

In fiscal year 1984 total O. & M., Guard and Reserve, is about 30 percent and it is 30 percent in fiscal year 1985, 31 percent in fiscal year 1986, and about 30 percent in fiscal year 1987.

So, there is a constant growth because the total Army budget in these outyears does have positive growth. This rather significant growth keeps O. & M. about the same proportion of the Army budget.

Senator HUMPHREY. Do you have the procurement figure?

General PEIXOTTO. Yes, I do. Procurement is running about 29 percent in 1983, and it moves up to about 32 percent in 1985, and to about 34 percent in fiscal year 1987.

Senator HUMPHREY. That is the shift that I was identifying. There is a significant increase in procurement and, I believe, a slight drop in O. &. M.

Can you give us the real growth in O. &. M. and procurement over those years? Our figures show that O. &. M. grew 3 percent in real growth in 1983; it is going to grow that much under this budget; whereas, procurement is going to grow 18 percent.

Do those figures correspond with yours?

General **Peixotto**. For O. &. M. Army I can give you the individual growth by years, the way they are projected.

Going into fiscal year 1984 we show 3.6 percent growth. Going to fiscal year 1985 we show 8.7 percent growth. Going to 1986 we show 8.5 percent growth and 1987 2.6 percent growth.

Senator **Levin**. This is real growth?

General **Peixotto**. That is real growth after inflation.

REAL GROWTH VERSUS PROCUREMENT

Senator **Levin**. Can you compare that to procurement?

General **Peixotto**. I don't have the procurement numbers. I can give you the absolutes.

Senator **Levin**. The real growth numbers?

General **Peixotto**. Let me provide that to you for the record.

Senator **Levin**. All right.

[The information follows:]

The following chart is provided to show the amounts and percents of real growth from fiscal year 1984 through fiscal year 1987 for each of the Army's Operation and Maintenance accounts and the procurement accounts. The chart is in constant fiscal year 1983 dollars:

ARMY O&M AND PROCUREMENT ACCOUNTS REAL GROWTH FISCAL YEAR 1984–87

[Amount in constant fiscal year 1983 millions of dollars]

Appropriation	Fiscal year 1984		Fiscal year 1985		Fiscal year 1986		Fiscal year 1987	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
O&M, Army	648	3.85	1,514	8.66	1,622	8.54	531	2.58
O&M, Army Reserve	−59	−8.60	49	7.84	5	0.74	55	8.14
O&M, Army National Guard	−83	−7.42	151	14.51	235	19.71	89	6.24
Aircraft Procurement, Army	407	14.83	283	8.97	50	1.46	−204	−5.85
Missile Procurement, Army	268	9.40	154	4.94	−32	−0.98	−335	−10.36
Procurment Wpns & Trac Veh. Army	302	5.99	386	7.22	207	3.61	−359	−6.05
Procurement Ammunition, Army	250	9.48	696	24.08	520	14.50	640	15.58
Other Procurement, Army	20	0.43	1,131	24.64	967	16.91	1,861	27.83

Senator **Levin**. Would you agree though that the general picture that I have drawn indicates there is a greater increase in procurement than there is in O. & M. over these years?

General **Peixotto**. Yes, Senator Levin, I do agree, there is greater growth in procurement than in the O. & M. accounts. I think the real issue is, is the growth balance, and does O. & M. need to grow at the same percentage as procurement needs to grow?

Senator **Levin**. Or greater?

General **Peixotto**. Or greater.

READINESS SHORTED

Senator **Levin**. If, in fact, we have shorted readiness and O. & M. in the past more than we have shorted procurement, should not that rate of growth be greater than the procurement growth?

General **Peixotto**. The evidence that I have, and my intuition says no, is that O. & M. should not grow at a greater percentage. The weapon systems we are bringing in, as is well known, are very expensive systems. I have examined in detail the O. & M. funding necessary to support those weapons.

We have a rather elaborate management system that tracks the procurement delivery plan for the next 5 years, based on the procurement program, and I have checked that against the projected O. & M. funding to support that equipment when it is fielded. Within our ability to estimate the dollars required to support an M-1 tank or an attack helicopter in the future, we have adequate O. & M. out here to support that equipment.

Now, I am quick to say that we are really learning each year how much additionally it costs to support this new equipment, because, we have never operated the M-1 tank in Europe. We have never operated the Blackhawk in Europe. But from contractors and the logistics community we have come up with detailed estimates. So, let us look at the overall issue.

If one would look at the O. & M. Army appropriation, there first is that element necessary to just run the installations and communities we have; that should remain fairly fixed over the next 5 years. We are not going to be adding installations.

I would like to think, as a matter of fact, that the amount of O. & M. to operate our installations, if you take inflation, should decrease, because the Army is becoming more and more efficient as we move out into the future, and we are reducing the cost of utilities; we are using capital investment procedures to lower our requirements for civilians in our workforce. So, we are trying to reduce the cost in O. & M. of the daily housekeeping facilities.

The major driver out there in the future is the support of these new weapon systems and that includes the training that goes along with it.

Senator **Levin**. Don't you estimate a $1.7 billion backlog in maintenance by 1987; wasn't that your testimony here today?

General **Peixotto**. No, sir.

Senator **Levin**. You are going to eliminate that? I am sorry.

General **Peixotto**. If all the numbers come out, we are going to approach eliminating that at the end of this 5-year period.

Senator **Levin**. You believe you are going to do that with this kind of increase in procurement?

General **Peixotto**. Yes, sir. I have been in this programing and budgeting arena in the Pentagon for a number of years and the projections that you see in the outyears are like Monopoly money. It is money you program with, but you never see all of it because the growth rates projected usually are more generous than we ever see by the time we put a budget together to bring over to you.

So, I do not want you to believe that the absolute will happen, but within the guidance that we have from the Secretary of Defense—and I would have to say that the Secretary of Defense has provided more funding guidance for the Department of the Army than I have seen in years—yes, I feel fairly comfortable that if we got all that money we can support the force.

Senator **Humphrey**. Senator Stennis, do you wish to ask questions?

Senator **Stennis**. Yes I certainly have been interested and concerned about these problems, and I commend these gentlemen for their efforts.

For several years I served as chairman of one of the only active subcommittees we had on the Armed Services Committee of the Senate, at that time which was the Military Construction Subcommittee. We set the numbers for ships, tanks and so forth.

With respect to the bad reports about the situation in Europe, I was part of the first group that went over there when arrangements were being made for our troops to come in. The other governments had their representatives present; they preached and guaranteed that they were going to carry most of the load, construction programs, everything of that kind; we would just send the man in uniform.

It is discouraging to see what has developed. I am not trying to place blame, but it naturally affects my thinking when we start talking about going into many other places.

Coming back home, I have looked hard for someone who was really trying to improve the situation and get a day's work out of the civilian employees, as well as the uniformed personnel. I have found that varied greatly.

CIVILIAN EMPLOYEE SHORTAGE

You talk about your civilian employees, gentlemen; you express a shortage here, you need more of those. How many is it you said you needed of civilian employees?

General **Peixotto**. I did not state a number. I have one. I will be happy to provide it.

Senator **Stennis**. If you have it in your mind now——

General **Peixotto**. We have a total shortfall of 58,000 civilians in the Army.

Senator **Stennis**. That is the Army alone?

General **Peixotto**. That is the Army alone; that is right. We have requirements for that many more civilians than we have authorized now.

Senator **Stennis**. Procurement is robbing the cost of daily operations, Mr. Chairman. At the same time I don't see how we are going to have money enough to pay the present force of civilians and the military people.

When it comes to procurement for these expensive weapons that you mentioned and for construction and retired pay, I think it might well decrease the amount we have left for the actual operations.

With respect to this weaponry cost, I remember the submarine, the fighting submarine, when I came on this committee was about $30 million. Of course, the Trident now is the super—maybe that is not a good illustration—but I believe it has passed the $1 billion mark, so there you are.

If I were going to be called on to give advice, I would say let us see if we can't hold down the total number of all these weapons and these different types of missiles. Everything has to have not one but three or four different kinds. I think it is using up all our money. That is one thing that prompted me to come around and get a better feel of that. So much of this budget goes for that purpose.

I want to commend General Meyer before he leaves. It seems to me he is doing outstanding work as Chief of Staff.

Thank you, gentlemen, for what you are doing. It is a hard job. I am sure you are doing a good job.

General PEIXOTTO. Thank you, sir.

Senator HUMPHREY. Senator Levin?

Senator LEVIN. I want to comment on Senator Stennis remarks about procurement robbing the cost of daily operations. That is a sentiment I share.

I want to give you one figure, and it is going to get worse. Here is the figure: In 1980 we spent 31 percent of our defense dollar on readiness, 24 percent on procurement. That is in 1980. We spent 7 percent more on readiness than we did on procurement.

By 1986, the way we are going, starting this year, we are going to spend 26 percent on readiness—that is a drop of 5 percent—and 38 percent on procurement, which is an increase of 14 percent, so that instead of spending 7 percent more of the defense dollar on readiness, as we did in 1980, by 1986 we are going to be spending 12 percent more on procurement. So, I tell you, if procurement has been robbing the cost of daily operations—and I happen to share that view very strongly—this thing is going to get much worse in the direction we are going.

We are going to drop the percentage of readiness by 5 percent and we are going to increase procurement by 14 percent. That is what we are trying to get at here this morning.

Thank you for yielding, Mr. Chairman.

Senator STENNIS. When I was sitting on the committee our membership was sitting on the right here, waiting for the development that was coming along. We did not do more than holler out and give warning. Certainly we are in the middle of a situation where we have to give some warning. To me it is the numbers of these highly expensive missiles that we are procuring.

I am glad you brought that out. It spells it out in the record in more detail.

Senator HUMPHREY. General, in the Army's case, how much of this increased share that goes to procurement is for big-ticket items? And if you have any figures, how much of this increase is devoted to big-ticket items and how much to items that bear almost as directly on readiness as the O. &. M. items like trucks and spare parts? Can you enlighten us in the regard?

General PEIXOTTO. Yes. I don't have all the figures I would like, but let me try to put it in perspective.

CRITICAL SHORTAGE OF TRUCKS

You mentioned trucks, for example. The Army has a critical shortage of trucks now. I recall testifying on our shortage of 5-ton trucks before the Congress 5 years ago. That is a discouragement for fellows like myself because those trucks are important to haul the ammunition.

What I am saying here is that we have had a serious underfunding of procurement accounts as well as the O. & M. accounts for years. The Army's failure to be equipped, or the inadequate equipping of the Army, is the result of years of inadequate funding, just as the serious conditions in the BMAR in Europe and throughout the Army are the result of years of serious underfunding. You can't do it all with the size of the budget the Army has had over the past years.

PROCUREMENT ACCOUNT SHORTAGES

So, the procurement account in some areas is growing significantly. I can cite, for example, in the aircraft appropriation it is going in 1982 from $1.9 billion to $2.7 billion. The bulk of that is to bring in the attack helicopter. The weapons and tracked combat vehicles appropriations are increasing about $1 billion, from approximately $4 billion to $5 billion. That growth is to bring in the Abrams tank.

However, I would also point out that the ammunition account is growing about $300 million, from $2.3 to $2.6 billion. Other procurement, Army is the unglamorous account where we buy radios, trucks, construction equipment, and non-weapons systems, things like that. This appropriation is growing from $3.7 billion in 1982 to about $4.6 billion in fiscal year 1983. So, I think you can see from these broad numbers we are trying to bring a balance to the items that are being procured.

I can assure you, if I were testifying here for the procurement account, there is not enough money for the Army's procurement account. This procurement budget still leaves us with serious shortages.

As I have already mentioned in my statement, we also have serious shortages in the O. & M. My point is that we work very hard within the OSD guidance to make a balance between the procurement and the O. & M. A very serious dilemma is that once we get all this equipment in the outyears and for some reason the O. & M. is cut back, like it has been in the last decade, then we are going to have a lot of modern equipment that is picking up a lot of dust. The tanks are not going to be running and the aircraft are going to be put in storage.

So, the O. & M. growth is absolutely essential to keep in balance with the growth of these procurement items.

Senator HUMPHREY. That balance is the whole challenge, of course, and there are no magic figures from year to year. This subcommittee is principally concerned with the O. & M. account. As you know, in past years Congress has often chosen the O. & M. account for cuts. In that context, because that option will be examined once again this year, how would you characterize the Army O. & M. budget to this subcommittee and to the Armed Services Committee? Is it lean? What would be the effect if it were reduced? What do you have to say about that?

General PEIXOTTO. This O. & M. budget is a very honest but lean appropriation. I identified in my opening statement areas where we vitally need additional funds. This appropriation is no great getwell for the Army. We are simply doing those essential things.

Senator STENNIS. You are treading water this year; is that what you are doing?

General PEIXOTTO. The main growth, as I pointed out—in this O. & M. appropriation is a half billion dollars, but that money is going to operate the equipment that we bought with appropriations several years ago. Now, if we don't get that growth, then we are going to have new equipment in 1983 sitting there idle, or we will have to go cut back the maintenance of our facilities or training or something else.

I don't think any of us are going to sit around and have the Abrams tank sitting on a dock in Hoboken, N.J., because we don't have the money to ship it to Europe. So, if we don't get the O. & M. we will have to cut back on training and maintenance.

EFFICIENCIES AND ECONOMICS

Senator **Humphrey**. What is this efficiencies, economies, and management-improvement campaign or program?

General **Peixotto**. I am glad you asked that question, because the Chief of Staff of the Army, when he swore me into office, charged me with improving the efficiency and economy of the Army; and concurrently with that the Secretary of Defense and Deputy Secretary of Defense Carlucci, as you are well aware, have made a very strong thrust in this area. So I have been given the task within the Army of orchestrating and coordinating the economies and efficiencies program.

I will have to say that we are really going at it from an organizational point of view instead of just talking about it. I have established a cell of some bright young officers in the Comptroller of the Army's office and we are going about what I, in my own terms, have called the "negative budget." The budget we bring over here is increasing. What we are now attempting to do is to collect a whole list of items that reduce the budget.

I have before me here in this notebook our first attempt to do that. Over the period from fiscal year 1981 to fiscal year 1987 this book represents $4.6 billion worth of savings that the Army either is achieving this year or will be achieving out in the future. I don't think that is enough. I think there are many more areas where we can improve the efficiency of the Army, because every dollar I can add to my book here means another dollar that we can put on training or maintenance or even procurement.

So, we are taking this very seriously. We will be glad to go through the details of this program if you would like.

COST DISCIPLINE ADVISORY COMMITTEE

Senator **Humphrey**. What about the Cost Discipline Advisory Committee, is that connected with this project or is that separate?

General **Peixotto**. It is clearly connected with this project. That committee of experts that the Secretary of the Army brought in has published a report with a detailed series of recommendations. We are in the process of reviewing all those recommendations to determine how we can best implement them.

The two men totally in charge of this are under Secretary of the Army, Mr. Ambrose, and the Vice Chief of Staff of the Army, General Vessey. I emphasize this; because this is not some program that has been passed down to my level. They are orchestrating it and the Army intends to aggressively go about reducing cost overruns in weapons systems that we have been seeing in the past. We have just recently reported five of them as a result of the Nunn amendment to last year's authorization bill.

Senator **Humphrey**. How much did you say is represented in that book?

General **Peixotto**. $4.6 billion worth of savings.

Senator **Humphrey**. Is that all procurement?

General **Peixotto**. No, sir; that is during the period of fiscal years 1981 to 1987; and includes all appropriations.

In the acquisition area, which is primarily procurement, we are projecting a total of $1.5 billion savings, and in the operations category we are projecting $3.1 billion savings. Actually, at the first cut on this we can show more savings in operations, but I want to be quick to say this is by no means a final number. We are just really learning how to go about this negative budgeting.

I would also add that not included in this book from the acquisition area is another $1.4 billion that we could add to it. This represents the elimination or reduction of 11 hardware systems that we have made during this past budget review.

Senator **Humphrey**. I understand that you are charged with maintaining the company books, but more importantly what is your responsibility?

General **Peixotto**. I wear a couple of hats. First, as this morning, I am the Appropriation Director for Operation and Maintenance. Almost every element of the Army's Staff is involved in the operation and maintenance appropriation; therefore, to orchestrate this I have what I call the Director of Operation and Maintenance, and that is at present Brig. Gen. Roger Price, who sits on my left. He and I pull together the program and budget for O. & M., and then also, once we get into the year of execution, we spend an awful lot of our time working with the major commands, or the MACOMS, to solve the daily problems of execution.

Now, also as Comptroller of the Army I have other responsibilities for putting together the total budget, responsibility for the cost estimating within the Department of the Army, and a very major responsibility I have, as any comptroller in the organization, is keeping the accounts.

I am responsible for the whole accounting system in the Army and keeping track of how much money has been obligated and how much money has been spent, and so on, and in addition to that, for paying the soldier.

We pay roughly 2 million people every month when you add up all the soldiers, the Active and the Guard, the retirees, and some of the dependents who are drawing, survivor benefit payments.

Senator **Humphrey**. General Price makes up the O. & M. budget; is that correct?

General **Peixotto**. Yes.

General **Price**. I pull it together and package it and attempt to make sense out of it.

Senator **Humphrey**. In doing that, do you have any latitude in the inflation estimate or must you accept whatever is handed you?

General **Price**. Basically we accept the defense indices for inflation which, of course, come from OMB. We do have the latitude for presenting our case for unique inflation rates. They are sometimes accepted.

Utilities on the west coast is a good example. The Navy has a very heavy population on the west coast and they are experiencing inflation rate increases there that are above the normal, and they were allowed to use their unique rates.

Basically, we accept the defense rate.

Senator **Humphrey**. I think that is the basis of our problems and why we so often need supplements.

OMB hands out inflation estimates which are a little optimistic, it seems to me, and we build some very serious budgets on those optimistic forecasts. Not unsurprisingly, they do not come out the way we had hoped. It causes a lot of turbulence and inefficiencies.

I think that is a basic problem, and we should be using much more realistic inflation assumptions or predictions, particularly in the area of defense which experiences atypical inflation rates.

Senator **Levin**?

Senator **Levin**. Thank you, Mr. Chairman.

BIG TICKET ITEMS

Before I pursue the line of questioning I have been engaged in this morning, I would like to emphasize to you all that the procurement items I am referring to, and I am disturbed by your big-ticket items—not trucks—I am talking about whether it makes sense to build two nuclear aircraft carriers and two new bombers and things like that. I am not talking about trucks.

I understand the shortfall you have there and I am not quarreling with that at all, but I am trying to get a big picture of the relationship between what we call procurement—because we have no better name for it, so we have to communicate with labels which aren't precise—and the readiness accounts.

There has been a historic shift taking place. I think we ought to be aware of what is happening. It is happening right in front of our eyes

Again, just for the record, let me just read some of these figures to you. Between 1970 and 1980 the percentage of the defense dollar—and now we are talking about the DOD, we are not talking about Army—the percentage of the defense dollar that goes to O. & M. is around 29, 30, and 31 percent, consistently. At one point it is 28.9. That is the lowest. The highest is 31.6. It is between 29 and 31 in terms of the percentage of the defense dollar going to O. & M.

The percentage of the DOD budget that goes to procurement varies between 21 and 25 percent, generally. There is one exception in 1 year to that out of the 10-year period. Suddenly, in 1982, the historic shift takes place. We see the drop of over a point in O. & M. and a three-point pickup in procurement.

In 1983 we see another two point drop in O. & M. and a four-point increase in procurement.

The pattern continues essentially in 1984, so that by the time we get to 1986 we have 38 percent of the defense dollar going to procurement and 26 percent going to O. & M.

Let me ask the question this way. General, are you concerned that if Congress does not accept big increases in the defense budget in this year and outyears, that the reductions are going to come from O. & M.?

General **Peixotto**. I am very definitely concerned about that, Senator Levin. If we proceed with the investments planned, and, I would add, needed, but see outyear cuts in the defense budget, then O. & M. is going to have a serious problem, because our responsibility for operating Army equipment and Navy ships and so on will be much greater.

If you cut back on that, as I indicated earlier, we are going to have equipment set aside.

Yes, I am very much concerned that we must keep up this funding level.

In addition to all the other debate that accompanies this budget, we are making a national decision to invest in a strong defense and, like any corporation, part of that decision is capital investment, and concurrent with an investment in capital comes the obligation to operate it once you have built it. So, it is similar to paying entitlements. If you are going to build a tank, aircraft carrier, or fighter plane, I hope that nationally we are committing ourselves to the fact that we will operate that equipment once it is delivered to the forces.

Senator **Levin**. History shows that those kinds of commitments can't be kept. The commitments that can be made and kept are the type such as a nuclear aircraft carrier. You will keep that commitment. It is an entitlement, just the way we have entitlements in domestic programs.

General **Peixotto**. The law requires that I pay soldiers so much money. Whether I have the money or not, I have to pay them.

Senator **Levin**. So, the commitments that this Congress can make and keep are the big-ticket items, such as the aircraft carrier. The ones that we can't keep are the O. & M. commitments in the future?

General **Peixotto**. That is correct.

Senator **Levin**. We have to make a political assessment essentially, an assessment of the mood of the country, an assessment where arms control is going, mainly an assessment of the economy, as to whether or not this economy is going to tolerate the kinds of deficits that we have. If it won't, how we are going to get that deficit down to $50 billion, not zero, and how, if we can't do it, we are going to have an increase of 19 percent in the defense budget; that is an assessment that we each have to make about the future.

I can't tell you that I am very confident that either this Congress or future Congresses are going to accept 18- or 19-percent increases, 13-percent real growth increases, in the defense budget, while we have this kind of deficit. I can't vote for that kind of increase in the defense budget, as troubled as I am with the maintenance items and readiness items, wanting to get into a Rapid Deployment Force much more quickly than we are. I can't in good conscience vote for that kind of increase in the budget.

My inclination is to say the hell with the B-1 bomber; let us speed up Stealth; the hell with two nuclear aircraft carriers; don't build the MX missile until you know how you are going to base it. At least figure out how you are going to base it before you build it, because you will probably have to redesign it. Those are my answers.

In terms of looking at history and what happened when the kinds of commitments that you want us to make can't be kept, history tells us where the cheating is going to come. I have to look at history and say to myself, how do we make these kinds of commitments in the procurement, particularly in the naval area, when we have real doubt, at least I have real doubt, that we are going to be able to maintain the kind of increases that the President has talked about and get this deficit down. That is the kind of judgment that we have to make.

DEDICATION TO READINESS

I must say, I have the exact same concern which you do about where this is going to come out. I think the work of this committee—and I know our chairman is absolutely dedicated to readiness, is very hard working—is to try to defend what we think is a reasonable balance, as the chairman put it, of readiness.

I don't, personally, as one Senator, want to see that balance in the outyears and I know where the imbalance is going to come if that is changed. It will come from the nonentitlement programs.

I have a lot of questions of you, General, for the record, because I want to try to get down to the other hearing with General Rogers. I have a number of questions for the record about some of our readiness accounts, about the contingency fund, about why we have not spent the O. & M. money that we have appropriated. Some reverted to the Treasury. It is hard to defend the strong position for O. & M. accounts when that money reverts to the Treasury.

Apparently in fiscal year 1981 something like $73 million reverted to the Treasury. I think it is important for the record that you tell us how that happened.

General **Peixotto**. Yes, I would like to have that opportunity.

Senator **Levin**. Other than that, I think I will just ask that the remainder of my questions be submitted for the record.

I want to thank the three of you for being here and being so helpful.

Senator **Humphrey**. Thank you.

I will have a number of questions I will submit in writing as well.

[Questions with answers supplied follows:]

Questions Submitted by Senator Gordon J. Humphrey

ARMY PRIORITIES

Senator **Humphrey**. General Peixotto, what are the Army's priorities in fiscal year 1983 and how are they reflected in the $500 million programed for real growth in operation and maintenance?

General **Peixotto**. The Army's highest priorities are to achieve and maintain a high degree of readiness and to insure essential modernization of our forces. These priorities are appropriately reflected in O. & M. real growth for fiscal year 1983, with approximately $400 million related to readiness issues and $350 million to modernization. (Other, lower priority areas experienced negative growth of approximately $250 million, to account for the net real growth of $500 million.) Significant readiness improvements are being made in the manning ($185 million) and training ($128 million) of our military units, and in our ability to rapidly deploy these units in the event of war ($93 million). In the modernization arena, we are concentrating most of the O. & M. real growth on the essential operating and support costs of fielding new equipment.

SUPPLEMENTAL REQUEST

Senator **Humphrey**. General Peixotto, what effect does the fiscal year 1982 supplemental request have on the Army's O. & M. Army requirements for fiscal year 1983?

General **Peixotto**. If the fiscal year 1982 supplemental request is not approved, the fiscal year 1983 requirements should be increased for reduction of real property maintenance ($275 million) and per diem equity ($3.8 million).

Senator **Humphrey**. General Peixotto, how will fiscal year 1983 OMA requirements change, by program, if the supplemental request is not approved?

General **Peixotto**. Each item requested in the fiscal year 1982 supplemental is: (1) direct or indirect result of inflation ($291.1 million); (2) new initiatives ($38.9 million); (3) transfers from other Government agencies ($29.1 million); or (4) programs suggested by Oversight Committee ($3.8 million). With the exception of two items (Reduction of Real Property Maintenance and Per Diem Equity), the fiscal year 1983 President's Budget fully funds the fiscal year 1983 program for the items in the fiscal year 1982 supplemental. If the fiscal year 1982 supplemental request is not approved, other items for which funds have already been appropriated in fiscal year 1982 will have to be deferred until fiscal year 1983 in order to fund the mandated items contained in the supplemental.

Senator **Humphrey**. General Peixotto, is the supplemental request for real property maintenance executable within fiscal year 1982? Did the Army request supplemental funding for this purpose?

General **Peixotto**. Yes. Army facilities engineers around the world are in the process right now of getting projects designed and procurement packages ready for obligation of the full $275 million as late as September. With this much lead time, there will be no problem with effective and efficient execution of the supplemental request. The very substantial backlog of critical projects, especially at most U.S. military installations and in Korea where many of the additional dollars would be spent, assures proper execution. On December 15, 1981, the Army submitted a report to this committee about real property maintenance in fiscal year 1982. In that report, the Army tabulated the number and dollar amount of backlog projects by facility category that four of the largest major commands were going to accomplish in 1982. This report shows that the emphasis in 1982 so far has been on getting something done in Europe. More than 60 percent of the allocations for backlog projects were in Europe, while Forces Command had less than 20 percent. Accordingly, the Army needs to do more to fix the facilities in areas other than Europe, and this supplemental request provides the means for doing just that. More than 87 percent of the supplemental would go to the other major commands in the Army, while Europe would receive $34 million. It is upon this basis that the Army is requesting supplemental funding for facilities maintenance.

CONTRACTING OUT REQUEST

Senator **Humphrey**. General Peixotto, how much of the fiscal year 1983 OMA request is available for contracting out?

General **Peixotto**. There are approximately $79 million in the fiscal year 1983 budget available for the Commercial Activities (CA) program. This figure contains approximately $13 million programed specifically for fiscal year 1983 plus the outyear tails of prior year CA programing. Therefore, the $79 million will be reduced by the costs of execution of the program in fiscal year 1982. To explain, OMA funds are programed for CA for the purpose of replacing the military level of effort being used in the activities prior to cost study decision. As the studies are completed and the military are diverted from the activities, they are replaced by OMA funds which pay for either a contract or a total civilian workforce depending upon the outcome of the decision.

Senator **Humphrey**. General Peixotto, how do increases in fiscal year 1983 OMA requests compare to previous years? What initiatives are underway to increase the Army's level of contracting out in the face of continued civilian manpower shortfalls?

General **Peixotto**. The table below displays OMA funding available for CA execution from fiscal year 1980 through fiscal year 1983.

[Dollars in millions]

Fiscal year:	
1980	$18.6
1981	38.7
1982	53.0
1983	79.0

The OMA funds are programed to cover the military level of effort contained in the CA cost studies. Program slippage in fiscal year 1980 and fiscal year 1981 has resulted in more activities being scheduled for completion of cost studies in fiscal year 1982 and fiscal year 1983. As these delayed studies containing military effort are completed, OMA funding will be used to pay for either a contract or a total civilian workforce.

With regard to the CA Program, the Army is not promoting any initiatives for the purpose of alleviating civilian manpower shortfalls. Under the CA Program, decisions to contract are made only when it is cost effective to do so. When a cost study decision is to contract an activity, the civilian spaces are deleted from the installation tables of distribution and allowances and redistributed to meet critical and high priority requirements.

MANPOWER SHORTAGE

Senator HUMPHREY. General Peixotto, what are the Army's outstanding manpower requirements for the training base? What factors impair the Army's ability to measure these requirements?

General PEIXOTTO. The fiscal year 1982 manpower shortage in the training base according to a recent study is 7,300 military and 7,700 civilians (totaling 15,000 personnel), of which approximately 3200 are trainers. For fiscal year 1983 the manpower shortage is somewhat greater because of increased loads. The difficulty in forecasting manpower requirements for the training base is caused by changes in training loads which result from end strength changes, varying success rates in recruiting, and changing attrition rates.

HIGH TECHNOLOGY TEST BED (HTTB)

Senator HUMPHREY. General Peixotto, the Army's request for the high technology test bed increases from $18 million in fiscal year 1982 to $43 million in fiscal year 1983. What factors account for such a large increase in this program? Outline the Army's 5-year plan for the HTTB and projected OMA requirements.

General PEIXOTTO. The Army's initial objective for the 9th Infantry Division High Technology Test Bed is to field a prototype High Technology Light Division (HTLD) in fiscal year 1985. This will be closely followed by the transition of additional light divisions to the HTLD design. In order to achieve this objective, our design concepts, both operationally and organizationally, must be tested and validated in fiscal year 1983 and fiscal year 1984. As such, our scheduled test work load will substantially increase in those years peaking in fiscal year 1983 as compared to fiscal year 1982. The fiscal year 1982 testing is primarily devoted to platoon and company level organizational structures and concepts. The fiscal year 1983 testing is designed to evaluate battalion and brigade level structures and concepts. These tests are more numerous, larger in scope, and more complex than the fiscal year 1982 tests. Follow on developmental work and testing will be necessary in fiscal year 1985 and fiscal year 1986 in order to further refine the HTLD and insure the efficient transition of other light divisions. The program is currently scheduled to begin winding down in fiscal year 1987 and conclude at the end of fiscal year 1988. The projected OMA requirements for the HTTB are as follows:

[Dollars in millions]

Fiscal year:	
1983	43
1984	43
1985	35
1986	35
1987	23
1988	22

FORCE MODERNIZATION

Senator HUMPHREY. General Peixotto, how did the fiscal year 1982 appropriation bill produce changes in the Army's OMA requirements for support of force modernization?

General PEIXOTTO. The fiscal year 1982 OMA request for support of force modernization was $977 million. This was to provide support for new or modernized equipment actually being delivered to the field in fiscal year 1982 plus all that of the same type delivered in previous years. This support consists primarily of transportation; initial stockage and recurring repair parts; fuel; formal school training of operators, mechanics, and supervisors; related base operations support; and appropriate supply depot and depot maintenance activities.

This request was reduced by $38 million during the appropriation process on the fiscal year 1982 request. The impact on overall OMA requirements for support of force modernization is unclear at this time as the Army is continuing to refine its estimates regarding the numbers of new and modernized equipment systems which will actually be fielded in fiscal year 1982. These distribution plans are subject to change in response to production changes.

The Army has initiated some new programs in fiscal year 1982 to better manage and control OMA funds appropriated by Congress for force modernization. The Army's major commands are being required to report their spending specifically for force modernization issues. This feedback will permit necessary reallocation of funds among systems and major commands and improve cost estimating. This requirement is the forerunner of improved Army accounting systems now under development which will capture the full cost of weapons and equipment systems as well as new or modified organizations.

Senator Humphrey. General Peixotto, how will demand grow within the Army supply system in order to support force modernization?

How is the above demand coordinated with the Army's Modernization Information Memorandum?

General Peixotto. Demands upon the supply system due to force modernization will be influenced by many factors, such as increased numbers and complexity of new systems. These factors will have both positive and negative impacts upon the supply system demands. Factors which can decrease demands upon the supply systems include improved Integrated Logistic Support (ILS) emphasis, Reliability Centered Maintenance (RCM) emphasis, disposition of old systems, standardization, improved data transfer, and increased quality control. The supply demand system will be used to control and manage any requirements generated by force modernization.

The Army Modernization Information Memorandum (AMIM) is a document used to forecast required resources for new systems, to include the demands that will be imposed on the supply system. The forecasted demand is provided by the materiel developer to the Army Force Modernization Coordination Office (AFMCO) and incorporated into the AMIM. AFMCO then staffs the data with Army Staff elements and sends it out to the Major Commands (MACOMs). The MACOMs use the data to program their requirements into the Modernization Resources Information Submission (MRIS) which is then sent back to DA for incorporation into the 5 Year Program Objective Memorandum.

EFFICIENCES AND ECONOMIES

Senator Humphrey. General Peixotto, what logistics-related areas are programed to achieve savings in fiscal year 1983? In outyears?

General Peixotto. As part of the Army's formal Economies, Efficiencies and Management Improvement (EEMI) program, several logistics initiatives to reduce costs have been programed through fiscal year 1987. The primary high dollar value initiatives are:

Improved Supply Disciplines: The Army is continuing a major effort, worldwide, to more effectively manage repair parts. These efforts include reducing parts retention time; redistribution of parts within Europe to avoid costly overseas procurements and shipment and timely return of repairable parts to and from maintenance activities. Annual savings of $17.0 million are expected from this program.

Army—dollars in millions

Fiscal year:	
1982	17.0
1983	17.0
Cumulative 1982–87	102.0

Maintenance Cost Reduction: As a result of the implementation of the Reliability Centered Maintenance (RCM) concept, the fiscal year 1982 President's budget (Amended) projected an annual savings of $10 million in the Army's Depot Maintenance program. Reliability Centered Maintenance concepts provide for identification of specifically needed repairs rather than scheduled repairs based on mileage or time in use. This procedure reduces maintenance requirements and costs. Projected savings through fiscal year 1987 are as follows:

Army—dollars in millions

Fiscal year:	
1982	10.0
1983	10.0
1982-87	60.0

Automated Marking and Reading Symbols (LOGMARS): Significant reductions in supply processing times will result through the use of machine readable symbology on items, unit packs, outer containers and selected documentation and the Army expects to save over $47.3 million by end of fiscal year 1987. Benefits through use of this technology include greater data accuracy; increased asset visibility; reduction in documentation; improved management information; and reduced pipeline time. The net savings LOGMARS will generate are shown below:

Army—dollars in millions

Fiscal year 1982-87	47.3

MSC/MTMC Consolidation: On September 16, 1981 the Deputy Secretary of Defense approved the conceptual integration of the Military Sealift Command (MSC) and the Military Traffic Management Command (MTMC). Integration is anticipated to occur during fiscal year 1983. This integration is anticipated to result in economies and efficiencies of scale and the elimination of some administrative duplication which is currently necessitated by the segregation of MSC and MTMC operations. Projected savings are shown below.

Army—dollars in millions

Fiscal year:	
1982	0
1983	0
Cumulative 1984-87	8.0

Consolidation of Property Shipping Offices: After studying 178 personnel property shipping offices (PPSO's) located in the continental United States, Deputy Secretary of Defense Carlucci in a memorandum dated August 11, 1981, directed that the traffic management and shipment functions of these offices be consolidated. Savings shown in the table below will result from reduced requirements for maintenance of data automation systems and administrative personnel. We also believe reductions in transportation cost will result through improved consolidation of shipments.

Army—dollars in millions

Fiscal year:	
1983	2.1
Cumulative 1983-87	5.3

Transfer of Consumable Items Management: On July 7, 1981, Deputy Secretary of Defense Carlucci approved the transfer of item management responsibility for an initial increment of 200,000 consumable items for the Military Services to DLA. The Army's portion of this 200,000 is 35,162 consumable items. The net savings that this transfer will generate is estimated to be approximately 12.2 million annually, beginning in fiscal year 1983, displayed as follows:

Army—dollars in million

Fiscal year:	
1982	3.1
1983	12.3
Cumulative 1982-87	64.6

Life Cycle Logistics: Consideration of logistics elements early in the life cycle of a system results in benefits during later stages of the life cycle. These benefits appear as improvements in reliability, availability, maintainability, manpower, training and inventory objectives. Because these benefits appear later in the life cycle they normally will not materialize early in the programming years, nor are they always readily measurable. However, because of the increased emphasis being placed on life cycle costing, a savings of $29.7 million in fiscal year 1987 is projected for several Army systems.

Retail Inventory Management Stockage Policy (RIMSTOP): RIMSTOP is an automated inventory control system that will allow cost effective decisions to be made on inventory levels. As this system is phased in, without affecting supply performance, one-time savings can be realized by reducing stockage levels. Additional supply system economies are budgeted based on the achievement of goals established to reduce order ship time. Savings from these two initiatives are displayed below:

Army—dollars in millions

Fiscal year:	
1982	0
1983	7.6
Cumulative 1983-87	49.3

Ammunition Demilitarization: The Army is involved in a two-year test to determine the feasibility of contracting out the demilitarization of seviceable/unserviceable, excess and/or obsolete ammunition. Savings are dependent upon the availability of contractors willing to undertake the task. The first Information For Bid was published 9 September 1981. Contracts were awarded in the November 1981-January timeframe. Estimated savings are shown below:

Army—dollars in millions

Fiscal year:	
1983	10.0
Cumulative 1983-87	50.0

Defense Retail Interservice Support (DRIS): Promotion of interservice support, interdepartmental and interagency support agreement concepts within the Department of Defense and among Army activities to eliminate duplicative efforts, whenever possible, without jeopardizing mission accomplishment will generate saving as shown below:

Army—dollars in millions

1982	0
1983	10
Cumulative 1983-87	50

Administrative Use Vehicles (AUV): As part of the March 1981, fiscal year 1982 Budget Amendment, a reduction in the cost for nontactical (or AUV) vehicle maintenance was made due to a large purchase of new, lighter and more economical automobiles. Savings as a result of this action are shown below:

Army—dollars in millions

Fiscal year:	
1982	6
1983	15
Cumulative 1982-87	81

Sealift Cargo Booking: By memorandum of 30 June 1981, Deputy Secretary of Defense Carlucci directed a realignment of cargo and passenger booking and contract administration functions from the Military Sealift Command (MSC) to the Military Traffic Management Command (MTMC). With this realignment MTMC, the DOD agency responsible for traffic management, will offer and book cargo directly (versus through MSC) with commercial carriers. As a result, administrative overhead is reduced and logistical support effectiveness is increased as shipping time is reduced three days. Savings are displayed below:

Army—dollars in millions

Fiscal year:	
1982	0
1983	1.0
Cumulative 1984-87	5.0

The Army's overall fiscal year 1983 budget request was reduced after identification of these economies. Future out-year budget requests will also reflect these economies and efficiencies.

DEFENSE LOGISTICS AGENCY

Senator **Humphrey**. General Peixotto, what is the effect on the Army's supply system of DOD's plan to consolidate consumable items under the Defense Logistics Agency?

General **Peixotto**. On 7 July 1981, the Deputy Secretary of Defense directed that 200,000 items (Army portion is 35,162) be transferred to the Defense Logistics Agency (DLA). Following that transfer, the Office of the Secretary of Defense has indicated they will evaluate the situation and determine if it is desirable to transfer additional items.

The principal impact of this proposal is the potential degradation of readiness and sustainability of the U.S. Army. This transfer trades off a proven operating support system for unsubstantiated savings.

The Army has long supported the one item, one manager concept and recognizes the benefits of centralization of management of nonweapon system consumables. However, the Army does feel that due to the specialized nature, as outlined below, of Service requirements:

(a) item design being driven by next higher assembly,

(b) end item application, and

(c) lack of readily available commercial sources,

the Services are best equipped to manage weapon systems consumables. This is an important issue as DLA manages items, not weapons systems; whereas the Army manages weapons as a total system.

The Army currently has visibility of the total weapon system to include each and every part from the end item to their components. We not only procure needed parts, but we repair them at both field and depot level and overhaul and buy next higher assemblies and end items. We can divert critical parts from production and maintenance contracts or disassemble unserviceable, uneconomically reparable assemblies and end items to meet critical readiness requirements. We can issue next higher assemblies when unable to provide piece parts in a timely manner. Our system ties projected increases, decreases, and changes in end item usage to our piece part requirements to allow us to procure parts in advance of fieldings or to reduce procurements in advance of withdrawals of end items from the field. DLA does not have these capabilities and, as a result of this transfer, the Services could lose control of parts of weapons systems some of which are critical. This could adversely affect readiness.

Recognizing current DLA and Service efforts to address these concerns, nevertheless, some issues will of necessity require long-term research, identification and problem resolution which could, in turn, contribute to a degraded readiness posture.

Our reservations, notwithstanding, we are participating in the test of DLA's management of a select group of weapon system consumables. We are insisting on the transfer of a full supply pipeline. We believe, therefore, that a minimum of two years from the date of the last item transferred to DLA will be required to adequately assess the readiness impacts of DLA management of weapon system consumables.

Questions Submitted by Senator Carl Levin

IMPORTANCE OF O. & M. FUNDING TO READINESS

Senator **Levin**. General Peixotto, you stress in your statement the importance of O. & M. funding to readiness. You also point out that the linkage between the operating and investment accounts is critical to providing an adequate and balanced Army that maintains near-term readiness and sustained modernization.

In the Army's fiscal year 1983 budget the real growth in O. & M. is 3 percent and the real growth in procurement is 18 percent. Is this an adequate and balanced budget that maintains near-term readiness?

General **Peixotto**. The bulk of the real growth in O. & M. Appropriation is for the support of new or modernized equipment being fielded in fiscal year 1983. This support consists primarily of transportation; initial stockage and recurring repair parts; fuel; formal school training for operators, mechanics and supervisors; related base operations support; and appropriate supply depot and maintenance depot operations.

Generally speaking, there is a two year lag between the time that a procurement budget is approved by Congress and the equipment is shipped to the user. So, with a few minor exceptions, a procurement increase in fiscal year 1983 will not increase

O. & M. requirements until fiscal year 1985. Likewise, if procurement dollar are reduced it is not reflected in an immediate reduction in O. & M.

The Army uses a unique funds programing system to estimate support requirements for force modernization to insure that funding requests reflect requirements accurately. This yearly programing technique includes the publication of detailed costing factors and instructions by the Army; a special and detailed cost estimating report submitted by each major Army command for each type of equipment system they will be receiving (in fiscal year 1983 the Army is intensively managing the O. & M. funding for 153 different equipment systems in this manner); and an arduous and formal Army review of the cost estimates. This review is continued through the budget and execution year to insure that funding provided for modernization is auditable and sufficient to maintain near-term readiness and sustain the Army's modernization program.

Volume 3 of the President's Budget provides a complete outline of the funding purposes; cost estimating techniques; and specific funding and manpower increases for each equipment system and major Army command for fiscal year 1983.

ARMY'S 5-YEAR O. & M. ACCOUNT

Senator Levin. General Peixotto, in my opinion, there is a real danger that the emphasis on procurement of big-ticket items in this 5-year program, most of which are not in the Army, is going to cause O. & M. and readiness to suffer. In the DOD budget as a whole there has been a significant shift in the percentage of the total budget going to O. & M. and the percentage of the total going to procurement in the last couple of years. Next year, in fiscal year 1984, the current 5-year program projects only 1.7 percent real growth in O. & M. spending.

How do the Army's O. & M. accounts from fiscal years 1984 through 1987 in the current 5-year defense plan compare to the procurement accounts in terms of constant dollars and real growth?

General Peixotto. The following chart is provided to show the amounts and percents of real growth from fiscal year 1984 through fiscal year 1987 for each of the Army's Operation and Maintenance accounts and the procurement accounts. The chart is in constant fiscal year 1983 dollars:

ARMY O. & M. AND PROCUREMENT ACCOUNTS, REAL GROWTH FISCAL YEAR 1984–87

[Amount in constant fiscal year 1983 millions of dollars]

Appropriation	Fiscal year 1984		Fiscal year 1985		Fiscal year 1986		Fiscal year 1987	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
O. & M. Army	61.8	3.85	1,514	8.66	1,622	8.54	531	2.58
O. & M. Army Reserve	−59	−8.60	49	7.84	5	0.74	55	8.14
O. & M. Army National Guard	−83	−7.42	151	14.51	235	19.71	89	6.24
Aircraft Procurement, Army	407	14.53	283	8.97	50	1.46	−204	−5.85
Missile Procurement, Army	268	9.40	154	4.94	−32	−.98	−335	−10.36
Procurement Wpns & Trac Veh, Army	302	5.99	386	7.22	207	3.61	−359	−6.05
Procurement Ammunition, Army	250	9.48	696	24.08	520	14.50	640	15.58
Other Procurement, Army	20	0.43	1,131	24.64	967	16.91	1,861	27.83

Senator Levin. General Peixotto, please provide for the record a table showing the Army's O. & M. and procurement accounts for fiscal year 1980 through fiscal year 1987 in current and constant dollars.

General Peixotto. The following table is provided for the record:

ARMY OPERATION AND MAINTENANCE AND PROCUREMENT ACCOUNTS, TOTAL OBLIGATION AUTHORITY FISCAL YEAR 1980–FISCAL YEAR 1987 [Dollars in millions]

	Fiscal year—							
	1980	1981	1982	1983	1984	1985	1986	1987
Operation and maintenance, Army	11,023	12,949	15,311	16,828	18,334	20,844	23,640	25,326
Fiscal year 1933 constant dollars	13,937	14,831	16,239	16,828	17,476	18,990	20,612	21,143
Operation and maintenance, Army Reserve	440	521	659	686	659	744	783	884

ARMY OPERATION AND MAINTENANCE AND PROCUREMENT ACCOUNTS, TOTAL OBLIGATION AUTHORITY FISCAL YEAR 1980–FISCAL YEAR 1987 [Dollars in millions]—Continued

	Fiscal year—							
	1980	1981	1982	1983	1984	1985	1986	1987
Fiscal year 1983 constant dollars	565	602	702	686	627	677	682	737
Operation and maintenance, Army National Guard	840	948	1,089	1,124	1,092	1,308	1,636	1,815
Fiscal year 1983 constant dollars	1,061	1,085	1,155	1,124	1,041	1,191	1,426	1,515
Aircraft procurement, Army	946	1,203	1,936	2,746	3,373	3,918	4,233	4,245
Fiscal year 1983 constant dollars	1,191	1,394	2,079	2,746	3,153	3,436	3,486	3,282
Missile procurement, Army	1,150	1,545	2,155	2,847	3,334	3,730	3,933	3,755
Fiscal year 1983 constant dollars	1,464	1,793	2,314	2,847	3,114	3,258	3,236	2,900
Procurement weapons and track vehicles, Army	1,794	3,374	4,002	5,031	5,703	6,517	7,191	7,195
Fiscal year 1983 constant dollars	2,263	3,908	4,295	5,031	5,332	5,718	5,925	5,566
Procurement ammunition, Army	1,153	1,559	2,303	2,639	3,024	3,922	4,690	5,662
Fiscal year 1983 constant dollars	1,397	1,742	2,420	2,639	2,889	3,585	4,105	4,745
Other procurement, Army	1,480	2,841	3,726	4,567	4,799	6,251	7,633	10,191
Fiscal year 1983 constant dollars	1,771	3,158	3,911	4,567	4,588	5,718	6,685	8,546

Conversion to fiscal year 1983 Constant Dollars computed using DoD Appropriation TOA Deflator Indices dated Feb. 2, 1982.

READINESS FUND

Senator Levin. General Peixotto, the fiscal year 1983 O. & M. budget includes a new $100 million contingency fund called the Commanders-in-Chief Readiness Fund. These funds will be controlled by the Chairman of the Joint Chiefs of Staff and are for as yet unknown readiness improvements. Apparently, if one of the commanders-in-chief has a good idea to improve readiness during fiscal year 1983, he can simply go to the Chairman of the JCS and get the money to carry it out.

I am not asking you to justify this new program. It certainly seems to me to fall in the nice-to-have category rather than the hard-requirements category.

My question to you, as Comptroller of the Army, is: Isn't there enough flexibility in the O. & M. accounts through existing reprogramming procedures to accommodate high priority readiness-related requests from Army field commanders? What types of readiness-related requirements cannot now be met out of the Army's O. & M. account that require a special contingency fund of this nature?

General Peixotto. The new Commander-in-Chief (CINC) Readiness Fund provides for financing contingency readiness requirements that are not by their nature amendable to the normal budgeting/reprograming requirements. For example, a joint exercise is conducted whereby deficiencies are discovered that do not require great amounts of money but if fixed can have an immediate impact on force readiness, war-fighting effectiveness, or efficiency of operations. Since the deficiency was not known prior to the test, requirements were not programed or budgeted. Another example might be the emergency replacement of supplies or minor equipment lost or destroyed by accident or disaster. A third might be training deployments to take advantage of unforeseen opportunities such as offers to train with allied forces. Within the prudent constraints established by OSD, the CINC can fix deficiencies and/or take advantage of unforeseen opportunities. This program, I might add, is in keeping with the SECDEF's desire to decentralize authority, improve performance, and encourage initiative.

Senator Levin. General Peixotto, Can you think of specific examples in the past year of high priority readiness initiatives requested by field commanders that could not be accommodated?

General Peixotto. If we are talking about the purposes for which the Readiness Fund can be used, no. But let me add that the kinds of things I normally hear about have big dollar tags attached to them. The CINC Readiness Fund will address small dollar items and will require a very quick reaction time.

Senator Levin. General Peixotto, at the end of fiscal year 1981 the last complete fiscal year, over $332 million in the O. & M. account DOD-wide lapsed. The Army had over $73 million lapsing in its O. & M. accounts. These figures represent budget authority appropriated by the Congress which the Army and the other Services were unable to obligate by the end of the fiscal year and which consequently reverted to the Treasury.

In the case of both the Army and the other Services, the amounts lapsing in fiscal year 1981 are significantly higher than in previous fiscal years. Why was the Army unable to use all of the money appropriated in fiscal year 1981? Does this mean that the O. & M. accounts are growing faster than the Services can realistically obligate?

General PEIXOTTO. Of the $73 million unobligate in the Army O. & M. accounts, the break by appropriation is $.9 million in O. & M., Army Reserve; $2.9 million in O. & M., Army National Guard; and $69.5 million in O. & M., Army. The unobligated amounts in the Reserve Component appropriations are considered normal.

The $69.5 million unobligated balance in the O. & M., Army appropriation appears unduly large on the surface; however, there are two specific circumstances which contribute to this situation:

a. The accounting treatment of foreign currency transactions is such that when the exchange rate is favorable to the U.S. dollar, the difference between the amounts obligated at the budgeted rate and liquidated at the current rate are collected in a centrally managed account and, on a net basis, reduce the total obligated at the appropriation level. This central collection or "profit" to the U.S. Government amounted to $30.7 million.

b. The Army submitted a prior approval reprograming request proposing a transfer of $20.6 million from O. & M., Army to Other Procurement, Army for base level commercial equipment. These funds were reserved for transfer in the O. & M., Army account; however, the transfer was not accomplished prior to the end of the fiscal year.

The remaining $18.2 million is the normal unobligated balance in the appropriation which is considered nominal for an appropriation of $11 billion. The O. & M. accounts are not growing faster than the Army can realistically obligate.

Senator LEVIN. General Peixotto, in 4 of the past 5 years the Army has been unable to efficiently use all of the O. & M. funds appropriated and these funds lapsed as follows: Fiscal year 1978, $27 million: fiscal year 1979, $63 million: fiscal year 1980, $0.6 million; and the fiscal year 1981 figure of $73 million. The total is $164 million. I know this does not seem like much in a multibillion dollar O. & M. budget but it is a lot to my constituents and whenever even cuts of such relatively small amounts are proposed by Members of Congress, the Services certainly create a great hue and cry.

Why shouldn't this committee, based on this past experience, reduce your O. & M. accounts by about $75 million in fiscal year 1983 in anticipation of similar unused funds?

General PEIXOTTO. The unobligated amounts referred to in fiscal years 1978 and 1980 are considered normal, in view of the size of the O. & M. appropriations and the numerous allocations, suballocations and allotments necessary to fund all activities of the Army world-wide. The answer to a preceding question explained that the fiscal year 1981 unobligated balances were normal, after consideration of funds accumulated through favorable foreign currency transactions and through reservation for an interappropriation transfer.

The fiscal year 1979 unobligated balance of $61 million consisted of $.7 million and $2.6 million in the O. & M., Reserve and National Guard appropriations, respectively, both considered normal.

The $59.4 million unobligated balance of the O. & M., Army appropriation in fiscal year 1979 consists of two elements:

a. As explained earlier, when foreign currency transactions are favorable to the U.S. dollar, the funds gained upon liquidation of obligations are collected in a central account. When such transactions are unfavorable to the US dollar, funds are transferred to the O. & M. appropriations from the Foreign Currency Fluctuation Fund, Defense in order to execute the program approved by the Congress. This was the case in fiscal year 1979. $271 million was transferred and $233.2 million was utilized. The difference of $37.8 million was not available for any other purpose and is incorporated in the unobligated balance.

b. The balance of the unobligated amount, $21.6 million is normal.

Based on above described peculiarities of the accounting for foreign currency transactions and the reservation for an interappropriation transfer, the remaining unobligated balances are considered normal in view of the size and distribution requirements of the appropriations. A reduction of $75 million could only serve to reduce approved program by like amount.

Senator LEVIN. General Peixotto, how much of the unused funds above in these years is attributed to late receipt of appropriations from Congress in the form of supplementals?

General PEIXOTTO. None of the unused funds are related specifically to late receipt of supplementals.

1982 SUPPLEMENTAL

Senator **Levin**. General Peixotto, the proposed fiscal year 1982 supplemental contains some $363 million for Army O. & M. If late/supplemental appropriations cannot be used by the Army, why should Congress approve them?

This question is even more relevant when one considers that most of the Army's O. & M. supplemental consists of $275 million for real property maintenance. This request comes on top of a fiscal year 1983 appropriation to date of $1.3 billion.

If this supplemental is not passed by the Congress until late in this fiscal year, can the Army really use this full amount efficiently? Wouldn't it make more sense to defer this $275 million to the fiscal year 1983 budget so that you would have adequate time to plan and obligate this money?

General **Peixotto**. As indicated above, supplementals are appropriately utilized and the $363 million fiscal year 1982 supplemental should be approved by the Congress.

Yes, as I stated earlier in my response to Senator Humphrey, the $275 million for real property maintenance could be effectively and efficiently executed in fiscal year 1982 as late as September. The huge backlog of facilities maintenance projects assures that the money can be applied to high priority needs. Army facilities engineers have been planning to accomplish high priority maintenance and repair work in fiscal year 1982. They are in the process now of completing design work and posturing the procurement packages for obligation of funds in the fourth quarter.

No, it could even be counterproductive to delay the fiscal year 1982 obligations into fiscal year 1983 because the economic situation today is conducive to receiving better competitive bids from prospective contractors and inflation continues to drive costs upwards over time. In other words, we can possibly get more done with the same $275 million in fiscal year 1982 than we could in fiscal year 1983.

Senator **Levin**. General Peixotto, the DOD O. & M. budget has increased $15.5 billion, or about one-third, in the last 2 fiscal years. The latest estimate for the fiscal year 1982 O. & M. budget, including recent supplemental requests, is $62.1 billion, up from $46.6 billion obligated in fiscal year 1980.

The GAO visited selected U.S. Army units in Europe and found that over half the funds provided for sustainment and new equipment in fiscal year 1981 had been diverted to other projects, most of them being real property maintenance items.

What are the controls in effect to assure that O. & M. funds are programed in the areas of highest priority? Who, and at what level, controls and authorizes diversion of funds from their original purposes?

General **Peixotto**. One unit the GAO reviewed diverted 48 percent, or $300,000 of the funds provided for sustainment and new equipment in fiscal year 1981. In the larger context of the total supplemental funding for sustainment and new equipment in Europe, $10 million of the $53 million provided in fiscal year 1981 was diverted for other purposes, but only when it was determined that the funds could not be used effectively for sustainment and new equipment before 30 September 1981.

At the Department of the Army, we establish priorities attuned to the Army budget objectives of manning, training, etc., and communicate the details of these priorities to the field by means of a thrice annual Program and Budget Guidance document. In addition, in the case of the fiscal year 1981 budget supplemental the Comptroller of the Army informed the operating commands and agencies that a special stewardship report would be required after the close of the fiscal year and that HQDA should be informed of the need to divert funds before any diversion took place so that we could determine if those funds could be used in another command for the purpose for which appropriated. The results of the stewardship report were that of the $223 million supplemental, total funding of $221 million were obligated for the purposes for which approved.

With regard to the third part of the your question, although it may vary depending on the command or agency, in general diversions of funds would be authorized at the division commander or equivalent level.

Senator **Levin**. General Peixotto, how good are the strategies, planning and prioritization for spending increased funds if they are diverted from their original purposes? Can the planning for O. & M. funds be improved to insure they are spent in the right order of priority?

General **Peixotto**. The Army constantly strives to improve its planning, programing, and prioritization processes so that O. & M. funds are used for the purposes for which appropriated; however, there are two factors that work against us in the course of actually executing the budget. The first is the annual nature of the O. & M. appropriations, which causes us to seek the most effective way to use funds as the fiscal year terminates. This is because training time lost cannot be regained, delays in hiring civilians cannot be recouped, and contracts that are not negotiated represent services foregone. The second is that such variables as production and distribution schedules, facility preparation and supply availability are frequently beyond the control of the operational commander. These facts not withstanding, diversion of funds usually takes place only after the highest priority activities have been fully satisfied to the extent that the real world constraints permit.

REAL PROPERTY MAINTENANCE AND REPAIR

Senator **Levin**. General Peixotto, are real property maintenance and repair projects an expedient outlet at the major and local command levels for unused O. & M. funds that could not be spent on operating and training which are more related to readiness?

Generel **Peixotto**. The Army must consider maintenance and repair projects both high priority and readiness related, especially in Europe until such time as our physical plant is vastly improved. The fiscal year 1982 budget and program supplemental are testimony to the Army's determination to stem the increase in the Backlog of Maintenance and Repair (BMAR). To the extent that fiscal year 1981 diversions of funds contributed to this goal, they do not represent a radical distortion of priorities.

TRAINING BASE OPERATION BUDGET

Senator **Levin**. General Peixotto, the Army Chief of Staff, General Meyer, has already testified before this committee that in the area of training the fiscal year 1983 budget fails to increase training above last year's levels and does not meet training base operation support requirements. Your statement today makes the same points.

What specific types of training base operation support requirements are not met by the fiscal year 1983 budget request? What is the impact of these shortfalls on individual and unit training?

General **Peixotto**. The FY 83 budget provides modest increases from the FY 82 level in individual and unit training. However, due to competing requirements for resources, the Army was not able to include sufficient base operations support in the fiscal year 1983 budget to accomplish the total training mission. The identified Base Operations manpower shortfall for fiscal year 1982 is approximately 2,000 military and 5,600 civilians. This has resulted in a reduction in supply operation hours and shortage of supplies and equipment; an increased maintenance backlog; a reduction in available transportation for unit and individual training activities; a reduction in quality of life programs, hence a reduction in soldier morale; and an increase in administrative processing time.

The inability to accomplish all of the missions/training base operations support requirements is the result of the shortage of civilians in the base operations areas cited above. Since 1979, TRADOC, similar to other MACOMs, has been required to absorb a number of non-workload related reductions in the civilian personnel arena resulting in a reduction in the training base operations support capability. The Army, through internal realignments, has been able to alleviate the most serious of these problems, however, shortages still exist and must be eliminated to ensure that the training base mission is fully met.

Senator **Levin**. General Peixotto, can you tell us how many days during fiscal year 1983 a typical infantry brigade will have the opportunity to train together as a unit in the field? Is this an acceptable level? What would the optimum level be?

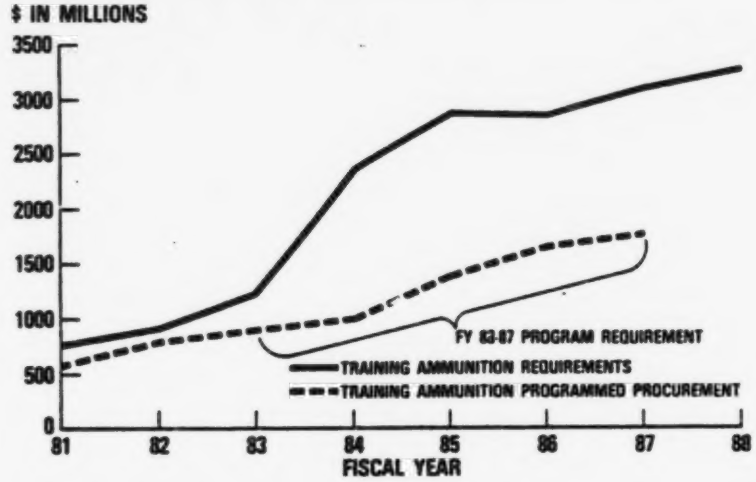
General **Peixotto**. A typical infantry brigade with appropriate supporting artillery and service support units spends about 10 days each year in the field—usually a 5-day field training period every six months that is exclusive of requirements to participate in joint exercises or conduct brigade rotations away from home station to the National Training Center, or to Fort Drum for cold weather training. This average period is barely an acceptable level and requires that brigades conduct Command Post Exercises without benefit of maneuver and full complement of combat support and service support units to maintain command and staff proficiency. An optimum level would be 20 days which would mean 5 field training days each quarter.

Senator **Levin**. General Peixotto, General Kroesen, Commander of U.S. Army forces in Europe, testified last week that the fiscal year 1983 budget does not meet his requirements for training ammunition.

A recent chart published in the Army Comptroller's overview of the Army's fiscal year 1983 budget—see below—shows, beginning in fiscal year 1983, a widening gap between the Army's training ammunition requirements and the amount of training ammunition the Army plans to buy. The shortfall in fiscal year appears approximately 20 to 25 percent, and by next year it gets much bigger.

-TRAINING THE FORCE-

TRAINING AMMUNITION REQUIREMENT VS PROCUREMENT



Senator **Levin**. General Peixotto, how well documented are the above requirements for training ammunition? Why is there such a large growth in the requirements for training ammunition in fiscal year 1984?

General **Peixotto**. The training ammunition requirements displayed in dollars in the Army Comptroller's overview of the Army's fiscal year 1983 budget are well documented. Requirements are forecasted based on unit training plans which consider Army Training Evaluation Programs, individual and crew qualification and familiarization, field training exercises and similar types of field training. A unit's Master Training Plan forecasts training ammunition on an optimum basis to insure training readiness. Each Major Command collects, reviews and consolidates training ammunition requirements from subordinate units. In turn, Major Command requirements are submitted to the Army's Deputy Chief of Staff for Operations and Plans for consideration. This task is accomplished annually by the Training Ammunition Authorization Committee (TAAC). The Joint Working Group of the TAAC examines what the Army needs to meet Major Command priorities and Department of the Army programming. Considerations include:

Changes in total Army force structure and organization.
Weapons system fielding plans.
Training devices and simulators fielding plans.
Research and Development initiatives in ammunition.
Procurement planning and funding constraints.
Unit prioritization for ammunition.
Mobilization and deployment sequence.
Unit status reports.

The large growth in the dollar requirements for training ammunition in fiscal year 1984 reflects the Army's best estimates for training soldiers, crews and units so that they may be able to fight in any part of the world and win. Training ammunition authorizations to meet field requirements in past years drew heavily upon old stocks, some War Reserve draw-down, and new buys. Today the old stocks are running out. Future training ammunition authorizations to meet field requirements will rely primarily upon new buys supplemented by obsolete and replacement stocks. New buys will include newer and more expensive munitions for new weapons. The rising cost of training ammunition requirements is not due to the Army's increased quantity demanded but primarily due to the cost of munitions for new weapons such as the Infantry Fighting Vehicle and Cavalry Fighting Vehicle, Divad, Stinger, 120mm gun on the M1 tank, improved 81mm mortar; the cost of mu-

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nitions to replace old stocks; and the cost of training unique ammunition—especially for new and additive (to the force) weapons. The cumulative cost of munitions is rising at a far greater rate than is the cumulative projected required quantities.

Senator **Levin**. General Peixotto. what are the shortfalls in training ammunition in fiscal year 1983? What will be the impact of these shortfalls on training and troop readiness?

General **Peixotto**. The dollar value of the total training ammunition requirement in fiscal year 1983 is $1.3 billion. The total authorized buy for 1983 is $832 million.

We are now in the early stages of the annual process for aligning training ammunition authorizations with Major Command requirements. This involves a comparison of Major Command training ammunition requirements with the existing asset posture, contract obligations and forecast procurement, war reserve stock requirements, asset locations and foreign military sales commitments. Until this process is complete, a precise picture of shortfalls cannot be known. However, it can be said with confidence that a 40 percent shortfall in small arms or medium caliber weapons ammunition for our Training and Doctrine Command, for example, could degrade Basic or Advanced Individual Training to unacceptable levels.

The Army has several initiatives which will refine the management of training ammunition relative to readiness. First, the Weapons Crew Training Study, currently in progress, will continue to determine the minimum quantities of ammunition needed for training. Second, a special commission of the best trainers in the Army is being convened to determine the quantities and types of munitions, by weapon system, essential for the soldier, crew, or unit to attain and sustain proficiency. Consideration, will be given to availability and maximum use of aids, devices, simulators, simulations, and sub-caliber firing. This baseline will then be used to manage and assess training ammunition requirements and shortfalls.

Senator **Levin**. General Peixotto, your statement includes a discussion of the Army's Force Modernization Program to better manage and control support costs associated with putting new equipment in the field.

The M-1 tank program has come under criticism for not sufficiently addressing the logistics and support requirements which need to be met to deploy the tank. It has been charged that an overemphasis by the Army on procurement of hardware has resulted in its inability to support the tank in the field when it is deployed this year.

Is this the case? Are the troops in the field adequately prepared in terms of training and maintenance capability to receive the M-1 tank?

General **Peixotto**. It is not completely accurate to say the army did not sufficently address logistics and support requirements for the M-1 tank. Early in the program, stability was achieved by continual emphasis on congressionally approved design-to-cost objectives. Emergence of life-cycle costing philosophy occurred after the majority of M-1 contracts were established and has been phased in as practical and economical. The Army was limited to funds to contract reliability, availability, maintainability, and durability which would reduce M-1 complexity and increase supportability. Despite the fact that we were unable to afford competing Integrated Logistic Support systems for the M-1 prototypes, the vehicle has designed into it significant supportability features that are improvements over the current tank. Once the Chrysler prototype vehicle was selected in 1976, logistic support efforts increased and have been receiving progressively greater emphasis and refinement throughout both engineering development and production testing. Based on progress to date toward solving the remaining support problems, the Army is confident that the M-1 Abrams is supportable in the near-term.

We as leaders, are inherently never satisfied in terms of troop training and maintenance capability. In the case of the M-1, if the enthusiasm and moral of the troops receiving the M-1 is any indication, they are more than adequately trained and prepared.

SUSTAINABILITY OF FORCES

Senator **Levin**. General Eicher, the Chairman of the Joint Chiefs of Staff, General Jones, has testified before this committee this year that the 5-year defense plan to improve the sustainability of our forces—the number of days they have sufficient ammunition, fuel and spare parts and other supplies to be able to continue to fight—does not accomplish this objective as quickly as desirable. Do you agree?

General **Eicher**. Yes, I do agree. The 5-year defense plan achieves defense objectives for sustainability through a steady build-up by the end of the [deleted] Funded Delivery Period. Although it may be desirable to have increased sustainability sooner, consideration must be given to maintaining balance to other Army programs as well as maintaining warm production bases where practical.

WAR-RESERVE STOCK

Senator **Levin**. General Eicher, what particular areas in our war-reserve stocks or in any of our other sustainability needs are not being addressed rapidly enough, in your opinion, in this budget?

General **Eicher**. I agree our sustainability needs are not being addressed rapidly enough in this budget. Although it would be desirable to accelerate the acquisition of additional ammunition, major items, and secondary items, attention must be given to maintaining balance with other Army programs as well as maintaining warm production capability for items being procured.

Senator **Levin**. General Eicher, what are the principal shortfalls in the Army's war-reserve stocks today? What progress will be made in eliminating these shortfalls in the fiscal year 1983 budget? What will the shortfalls look like at the end of the current 5-year Defense program?

General **Eicher**. Principal shortfalls occur in our war reserve stocks in ammunition, secondary items, and major end items. The current 5-year defense program achieves defense sustainability objectives by the end of the [deleted]. Funded Delivery Period. The fiscal year 1983 budget improves ammunition [deleted] over war reserves prepositioned as of December 31, 1981. By the end of the [deleted] funded delivery period we will have met the defense objectives in all three areas.

Senator **Levin**. General Peixotto, your statement points out that the fiscal year 1983 budget does not include funds to correct many serious shortfalls in the Army's mobilization base, such as stockage of nonperishable medical material, reserve equipment and major items for the training base expansion.

Can you give some specific examples, with more complete details for the record, of the requirement for some of these items and the current inventory?

What progress will you make on overcoming these serious shortfalls by fiscal year 1987?

General **Peixotto**. The Army Reserve is currently below current wartime requirement by some $5.9 billion worth of reportable equipment. Equipment shortages are in the areas of vehicles, communications/electronics, medical and engineer. This fiscal year 1983 Army budget will reduce the reportable wartime required equipment shortfalls to about $5.5 billion.

At the end of fiscal year 1981, to meet full wartime mobilization requirements, the Army National Guard needed an equipment inventory valued at $11.8 billion. Equipment on hand was valued at $8.1 billion or 69 percent of the wartime requirement. This shortfall has a value of $3.7 billion. This dollar figure does not represent the cost of providing modern equipment.

Both Reserve Components will realize additional equipment from the fiscal year 1983 funding request. This additional equipment will result both from distribution of new procurement and from redistribution of items from Active and Reserve component units based on total force distribution priorities at the time fiscal year 1983 procurements are delivered.

[Deleted.]

Also, the 15 Feb 82 Annex to Volume II, Force Readiness Report, being submitted to Congress required by the fiscal year 1982 Defense Appropriations Act, describes equipment planned for distribution to the Reserve Components as a result of procurement and other distribution actions for the fiscal year 1982-85 time frame.

The current emergency surge capacity of the Army training base is constrained primarily by a shortage of key items of training equipment. Funds provided in fiscal years 1985 and 1986 of the Army Program will help alleviate this problem. They are for the purchase of critically needed items of equipment, ranging from M16 rifles and machineguns to mortars, howitzers and anti-tank weapons; as well as for additional sets of individual clothing and equipment for initial entry trainess. Specifically, the Army is planning to procure some 83,000 M16 rifles for use by the mobilization training base, and to stockpile approximately 225,000 sets of individual clothing and equipment for issuance to mobilization trainees. In addition, specific funds for additional training facilities and ammunition to support training are being developed and will be included in future Army programs.

Shortages of non-perishable medical materiel, i.e., equipment, continues to plague all elements of the force to include Active Army, as well as Reserve Component forces. There is insufficient funding thru fiscal year 1983 to equip the early deploying medical force in support of a NATO scenario. Resources are included in the fiscal year 1983-87 Program to outfit the medical force thru the [deleted] timeframe;

however, total obligation authority limitations and prioritization continues to push this effort to the outyears. Within current funding programs it is anticipated that the early deploying force for NATO will be equipped by fiscal year 1987 and a start will be made on the additional medical force if current identified program reaches the funded level.

Senator HUMPHREY. I just want to say in closing that I share Senator Levin's concern about the vulnerability of the O. & M. accounts. I will say in the administration's defense that it is having to bear a heavy burden of force modernization because decisions that should have been made previously were deferred for one reason or another. Nevertheless, it is a very disturbing picture.

Thank you.

General PEIXOTTO. Thank you, Mr. Chairman.

[Whereupon, at 10:55 a.m., the subcommittee was adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 2, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

NAVY AND MARINE CORPS OPERATION AND MAINTENANCE

The subcommittee met in open session, at 10 a.m., pursuant to notice, in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senators Humphrey and Levin.

Also present: Michael B. Donley and David S. Lyles, professional staff members, and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony on the Navy and Marine Corps requests for operation and maintenance in fiscal year 1983. We are pleased to have with us Rear Adm. Richard Miller, Director of the Office of Budget and Reports, U.S. Navy, and Lt. Gen. Harold Hatch, Deputy Chief of Staff for Installations and Logistics, U.S. Marine Corps.

The subcommittee's objectives in this hearing are basically fourfold: First, to establish how the Navy arrived at the current balance within its budget, which on the surface appears heavily weighted toward shipbuilding, and to understand those factors which allow the Marine Corps to use a smaller proportion of its budget for O. & M.

Second, we seek an explanation of the slight decline in steaming days in fiscal year 1983 and how the Navy views this decline.

Third, to review the funding profiles for facility and depot maintenace in light of outstanding requirements and other O. & M. priorities.

And, last, to examine the balance of resources within the O. & M. budgets, and establish the tangible improvements in readiness that should result from these requests.

Admiral Miller, will you lead off with your statement?

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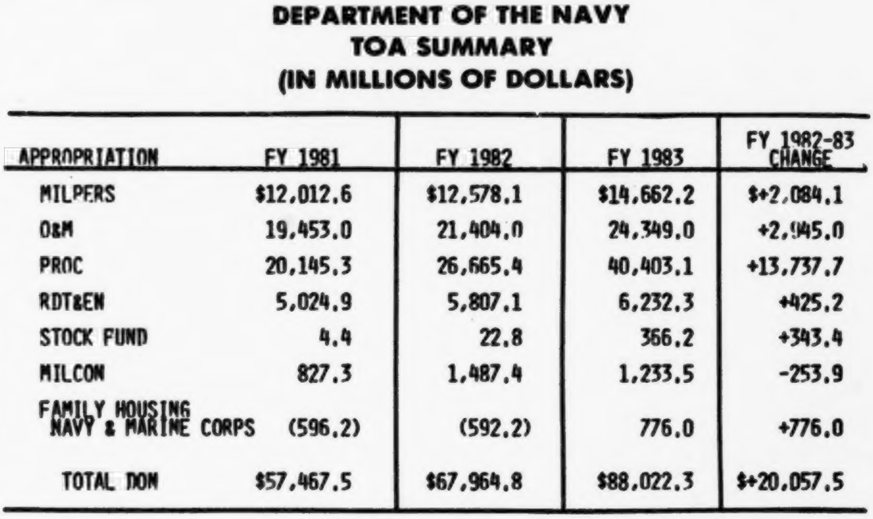
STATEMENT OF REAR ADM. RICHARD MILLER, DIRECTOR OF THE OFFICE OF BUDGET AND REPORTS, U.S. NAVY

Admiral **Miller**. Mr. Chairman, I appreciate the opportunity to present the Navy's 1983 budget and the 1982 supplemental requests for operation and maintenance appropriations. I would like to make a brief summary presentation. I have submitted my more detailed statement for the record.

Senator **Humphrey**. That will be placed in the record following your testimony.

Admiral **Miller**. General Hatch will address the operation and maintenance appropriations for the Marine Corps and the Marine Corps Reserve.

During my discussion I will be using the charts that you have before you. I believe that the presentation will be easier to follow that way.



DEPARTMENT OF THE NAVY
TOA SUMMARY
(IN MILLIONS OF DOLLARS)

APPROPRIATION	FY 1981	FY 1982	FY 1983	FY 1982-83 CHANGE
MILPERS	$12,012.6	$12,578.1	$14,662.2	$+2,084.1
O&M	19,453.0	21,404.0	24,349.0	+2,945.0
PROC	20,145.3	26,665.4	40,403.1	+13,737.7
RDT&EN	5,024.9	5,807.1	6,232.3	+425.2
STOCK FUND	4.4	22.8	366.2	+343.4
MILCON	827.3	1,487.4	1,233.5	-253.9
FAMILY HOUSING NAVY & MARINE CORPS	(596.2)	(592.2)	776.0	+776.0
TOTAL DON	$57,467.5	$67,964.8	$88,022.3	$+20,057.5

CHART 1

NAVY'S TOA

On chart No. 1 we present the Department of the Navy's total obligational authority over the 3-year period. It is also broken down by appropriation category. It shows the total operation and maintenance requests of $24.3 billion, an increase of $2.9 billion over the amount requested in 1982.

I think it is also helpful to show the appropriation categories by percentages of the total TOA, as displayed in chart No. 2.

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DEPARTMENT OF THE NAVY
BUDGET COMPOSITION
FY 1983

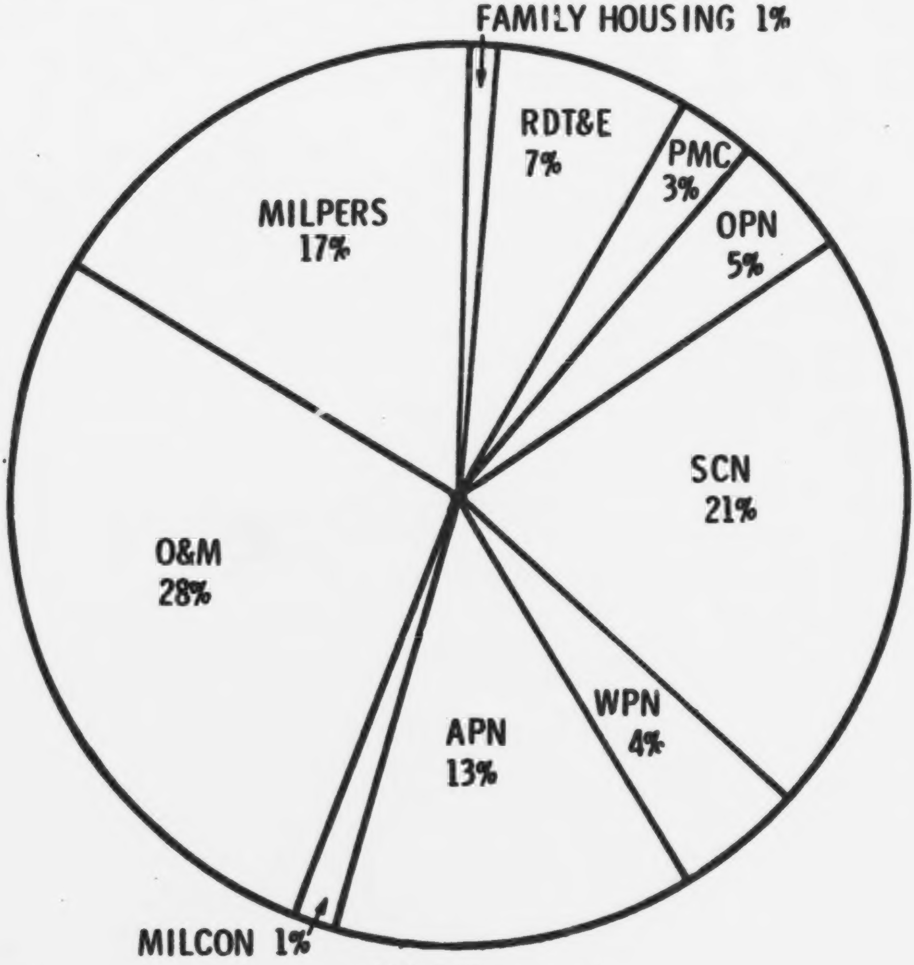

CHART 2

Mr. Chairman, this is the area in which you had a particular question concerning the percentage of the total budget that is devoted to operations and maintenance. And in that particular category the 28 percent represents four appropriations in there: The Navy and Navy Reserve, and the Marine Corps and the Marine Corps Reserve.

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DEPARTMENT OF THE NAVY
BUDGET TRENDS
CONSTANT DOLLARS

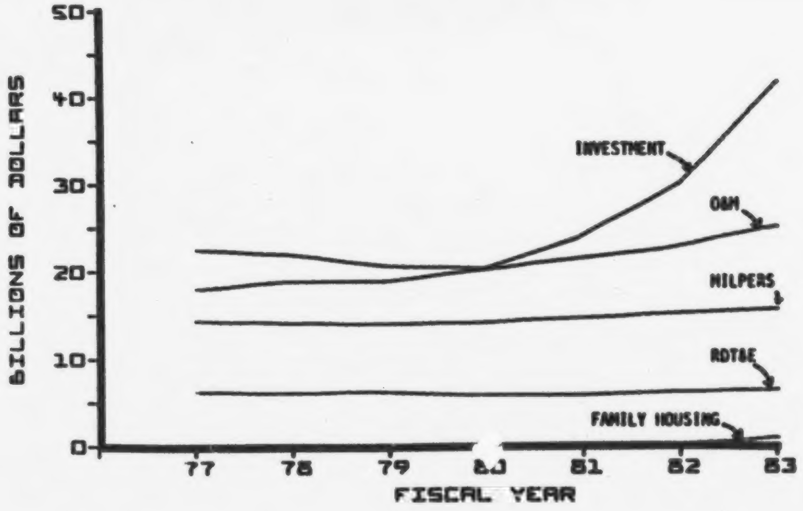

CHART 3

If you will turn to chart No. 3, you will see the funding level trends over the past several years. The big jump in the investment area from 1982 to 1983 is largely the result of fully funding two new nuclear carriers and also two Trident submarines in 1983. The funding of the two carriers in 1983 is expected to save the Navy about $700 million and cut 22 months off the delivery time of each of these two ships.

FAMILY HOUSING

Also, you will note that for the first time family housing is a service account. Prior to fiscal year 1983, this was a single Department of Defense appropriation, handled by OSD. The amount is $776 million in 1983 in the Department of the Navy.

I would also point out that operation and maintenance in constant dollars shows real growth.

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DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE
(IN MILLIONS OF DOLLARS)

APPROPRIATION	FY 1981	FY 1982	FY 1983	FY 1982-83 CHANGE
O&MN	17,786.4	19,588.6	22,165.8	+2,577.2
O&MMC	1,089.8	1,204.0	1,481.8	+ 227.8
O&MNR	548.2	571.1	653.0	+ 81.9
O&MMCR	28.6	40.3	48.4	+ 8.1
TOTAL O&M	19,453.0	21,404.0	24,349.0	+2,945.0

CHART 4

The next chart, chart 4, depicts the funding levels of the four operation and maintenance appropriations. These appropriations finance the operations which have the most direct and immediate impact on current readiness for our Navy and our Marine Corps. I know you have heard this many times, but the critical importance of adequately financing these appropriations cannot be stressed too strongly. Whatever size Navy the Congress provides we all agree that it must be ready and it must be properly supported, otherwise we will be wasting the resources on the procurement side to build the force structure. This is the very reason we are requesting a fiscal year 1982 program supplemental.

DEPARTMENT OF THE NAVY
FY 1982 PROGRAM SUPPLEMENTAL
(IN MILLIONS OF DOLLARS)

	PREVIOUSLY APPROPRIATED*	SUPPLEMENTAL REQUESTS	REVISED TOTAL
O&MN	$19,359.5	$229.1	$19,588.6
O&MMC	1,178.7	25.3	1,204.0
O&MNR	570.9	.2	571.1
O&MMCR	40.3	-	40.3
TOTAL	$21,149.4	$254.6	$21,404.0

*INCLUDES TRANSFER & REAPPROPRIATIONS

CHART 5

On chart 5 I would like to address the program supplemental just briefly. The four operation and maintenance appropriations are broken down and total $254.6 million in supplemental requests.

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DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE,NAVY AND NAVY RESERVE
FY 1982 SUPPLEMENTAL PROGRAMS
(IN MILLIONS OF DOLLARS)

PROGRAM	REQUEST O&M,N	REQUEST O&M,NR
DOPMA	$ 7.2	
UNEMPLOYMENT COMPENSATION	$11.5	
LEASAT	$58.6	
PUBLIC HEALTH SERVICE	$ 3.3	
UTILITIES	$52.0	
USPS RATE	$ 2.3	
EMPLOYEE HEALTH BENEFITS RATE	$14.1	$ .2
VETERANS EDUCATIONAL ASSISTANCE PROGRAM (VEAP)/ EDUCATIONAL ASSISTANCE TEST PROGRAM (EATP)	$ 5.1	
MAINTENANCE OF REAL PROPERTY (MRP)	$75.0	
TOTAL	$229.1	$ .2

CHART 6

Chart 6 gives a little more detail of what is included in this request. These are fact-of-life costs resulting from legislation, from higher than budgeted inflation, or from other programs approved by the Congress but left unfunded. Unfortunately, to accommodate these "must fund" programs this late in the fiscal year within the presently appropriated funds would require drastic action that could not help but adversely affect readiness programs.

About the only flexibility that we have at this point is in such programs as flying hours or OPTEMPO or aircraft reworks. I won't discuss each of these in detail at this time, but I would be happy to answer any detailed questions you might have later.

The 1982 pay raise supplemental is not included, as it has not been forwarded to Congress yet. Mr. Stockman expects to forward that up sometime in April.

I would like to discuss our fiscal year 1983 request in more detail at this time. First I will address the operation and maintenance Navy request. Up to this point I have been referring to the Department of the Navy.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE, NAVY
(IN MILLIONS OF DOLLARS)

	FY 1981	FY 1982	FY 1983	FY 1982-83 CHANGE
STRATEGIC FORCES	$ 697.8	$ 833.4	$1,053.2	$+219.8
NAVAL FORCES	2,405.3	2,821.9	3,203.1	+381.2
SHIP MAINTENANCE/MODERNIZATION	3,944.5	4,435.6	5,239.5	+803.9
TACTICAL AIR FORCES	1,462.7	1,571.9	1,514.5	-57.3
AIRCRAFT REWORK	1,398.6	1,479.8	1,649.7	+169.9
BASE OPERATIONS	2,356.1	2,657.4	2,734.5	+77.1
STRATEGIC SEALIFT	139.2	253.2	322.2	+69.0
OTHER DEPOT MAINTENANCE	600.1	789.9	831.3	+41.4
CENTRAL SUPPLY ACTIVITIES	636.6	734.1	789.8	+55.7
LOGISTICS SUPPORT	2,015.6	2,262.6	2,567.7	+305.1
COMMUNICATIONS/INTELLIGENCE	573.2	724.8	827.2	+102.4
TRAINING AND EDUCATION	457.8	560.4	614.0	+53.6
MEDICAL	320.3	353.9	387.0	+33.1
RECRUITING AND ADVERTISING	81.1	78.0	93.5	+15.5
OTHER PERSONNEL SUPPORT	91.9	114.5	127.5	+13.0
ADMINISTRATION	299.2	335.5	362.7	+27.2
OTHER	121.6	28.2	16.4	-11.8
INDUSTRIAL FUND/STOCK FUND SUPPORT	184.8	-208.0	-168.0	+40.0
PAY SUPPLEMENTAL		-238.4		+238.4
TOTAL:	$17,786.4	$19,588.6	$22,165.8	$+2,577.2

CHART 7

On this chart the Operations and Maintenance Navy appropriation is broken down into broad program areas to give a better picture of the type of efforts that are covered. I will discuss a few of these programs.

In addition to many other things, the first two lines—strategic forces and naval forces—contain funds for ship OPTEMPO. OPTEMPO for our deployed fleets is about the same as it was last year: The two deployed fleets being the 6th Fleet in the Mediterranean and the 7th Fleet in the Pacific.

There is a slight decrease for our nondeployed forces, but this is not expected to hurt readiness over the short term and it will give our sailors more inport time following long deployments. Twenty new ships will join the fleet in 1983, including the third Trident submarine and the battleship *New Jersey*.

SHIP MAINTENANCE AND MODERNIZATION

The ship maintenance and modernization program increases by $381.2 million, which provides for an increase of three overhauls over what we have planned in 1982. In addition, there is a richer mix of ships being overhauled which contributes to the greater cost.

Although the Tactical Air Forces program shows a decrease of $57.3 million from 1982 to 1983, flying hours actually increase. The decrease is due to revised fuel prices which are projected to decrease in 1983. I can get into that in more detail if you would like later. But suffice it to say, the funds that have been requested provide for increased flying in 1983.

Our continual emphasis on aircraft maintenance is expected to result in an increase to our mission capability rate. It is projected to be 62 percent in 1983, an increase from 60 percent in 1982.

Strategic Sealift continues the initiatives begun in previous years. This includes 14 near-term pre-positioned ships, 8 SL–7 fast transport ships, and an increase in the Ready Reserve fleet, which will number 33 ships.

The total O. & M., N. request is $22.1 billion an increase of $2.5 billion over 1982.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE, NAVY RESERVE
(IN MILLIONS OF DOLLARS)

	FY 1981	FY 1982	FY 1983	FY 1982-83 CHANGE
SHIP OPERATIONS	$ 42.1	$ 53.9	$ 45.6	$- 8.3
SHIP MAINTENANCE	101.2	67.8	140.4	+72.6
AIR RESERVE FORCE	185.7	217.1	202.1	-15.0
AIRCRAFT MAINTENANCE	80.4	88.8	95.0	+ 6.2
SURFACE SUPPORT FORCE	2.7	4.9	5.2	+ .3
CONTRACTOR TECHNICAL ENGINEERING SERVICES	8.1	8.6	10.0	+ 1.4
BASE OPERATIONS	118.2	134.8	146.5	+11.7
OTHER	9.8	11.0	8.2	- 2.8
PAY SUPPLEMENTAL/FUEL		-15.8		+15.8
TOTAL	$548.2	$571.1	$653.0	$+81.9

CHART 8

Moving now to the Operation and Maintenance Navy Reserve [O. & M., NR] appropriation, chart 8 displays the account by major programs. Although some of the growth shown in this appropriation is due to inflation, there is program growth in areas that support the development of a larger and more ready reserve force.

SHIP OVERHAUL BACKLOG

For instance, there is a substantial increase in the number of ship overhauls. Thirteen ships are programed for overhaul in 1983, compared to seven in 1982.

Ship OPTEMPO of 14 days per quarter remains level with fiscal year 1982, and is required for an acceptable readiness posture. The decrease in funding results mainly from a slight decline in the number of ships in the Naval Reserve Force, and a reduced number of ships available for operations because of the increased number of overhauls.

As in the O. & M., N. appropriation, the way the fuel prices are displayed accounts for the funding decrease in the Air Reserve program, but the flying hours are budgeted at about the same level they were in 1982.

DEPARTMENT OF THE NAVY
READINESS INDICATORS

INDICATOR	FY 1981	FY 1982	FY 1983	GOAL
o SHIP OPTEMPO (DAYS/QUARTER)	43.8	41.6	40.2	43
o PMR (%) (SIMULATORS)	86(3)	85(3)	86(3)	88
o SHIP OVERHAUL BACKLOG*	16	16	11	11
o BMAR ($MILLIONS)	$644	$580	$611	0
o COMPONENT REWORK (%)	96.3	98.0	100	100
o MISSION CAPABLE RATE (%)	59	60	62	70
o AIRFRAMES ON EXTENSION (%)	6	9	6	6
o BARE FIREWALLS (NO.)	80	80	36	36-40

* OPERATIONS LIMITED

CHART 9

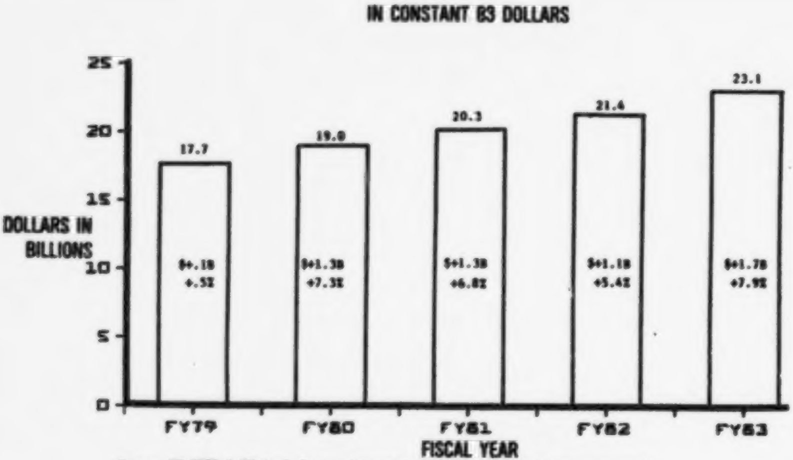
I would now like to cover some of our readiness indicators, which are shown on the next chart, chart 9. As previously discussed, the OPTEMPO reduction results mainly from a decrease in the nondeployed fleets. Primary mission readiness increases slightly, to 86 percent. Approximately 3 percent of that will be provided by simulators.

Ship overhaul backlog is due solely to operational constraints in fiscal year 1983. We have provided funding for all ships that are due for overhaul in 1983, with the exception of 11 that are unavailable because we need them for operational reasons.

We are moving slowly to our goal of having a 70-percent aircraft mission capability rate. As already noted, this increase in mission capability certainly reflects, in part, our emphasis on depot maintenance. Many other factors, however, impact on mission capability, such as manning levels.

Although the installation of aircraft modifications is not considered depot maintenance, these modifications are normally installed during aircraft rework. We have an unfunded requirement in this area, and this will most likely result in a slight change to our aircraft maintenance indicators. In other words, depot maintenance funds will be used, as necessary, to install modifications during budget execution. The positive trend in almost all of our readiness indicators is a direct result of the resources applied.

DEPARTMENT OF THE NAVY
OPERATION AND MAINTENANCE, NAVY AND NAVY RESERVE



Note: FY 1982 & 83 include contingencies for pay and legislative proposals

CHART 10

The next chart clearly shows the real growth in our O. & M. accounts in the past several years. This bar graph shows the real program growth in constant 1983 dollars for both the operation and maintenance Navy and the Navy Reserve operating accounts. And you see from 1982 to 1983, we are expecting to have a 7.9 percent real program growth.

DEPARTMENT OF THE NAVY
CIVILIAN PERSONNEL
END STRENGTH

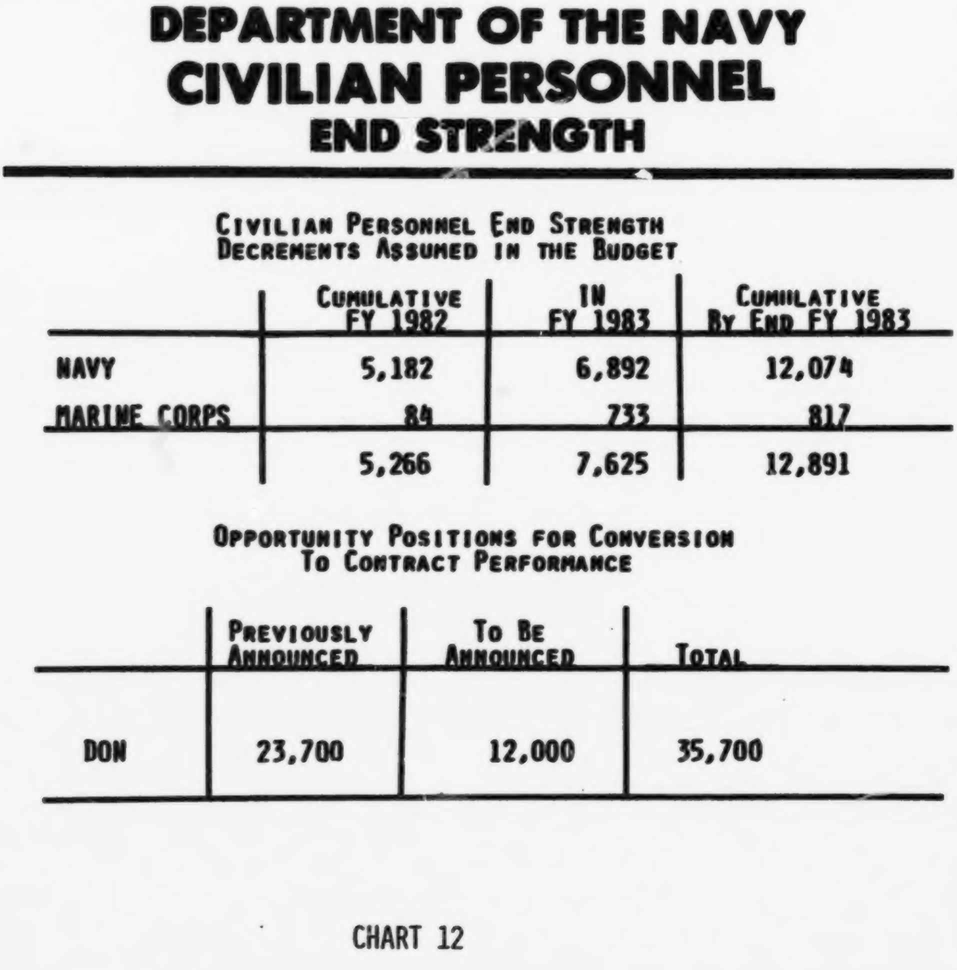
DEPARTMENT OF THE NAVY	FY 1981 320,858	FY 1982 319,175	FY 1983 320,572
NAVY	301,055	299,029	299,935
MARCORPS	19,803	20,146	20,637
(INDUSTRIAL FUNDS)	(169,196)	(169,012)	(173,025)

CHART 11

BEST DOCUMENT AVAILABLE

I would like now to address civilian end strength. Total civilian end strength levels are essentially stable over the budget year. The fiscal year 1983 increases for improved readiness are mostly offset by projected efficiencies and economies, including contracting out. Significant readiness enhancing capability increases for 1983 are: ship repair and alterations, which require an additional 5,000 people, aircraft maintenance, where we have an additional 900, central supply support, with about 1,600, and ordnance maintenance, about 500. These increases will allow us to keep our ship overhaul backlog to an operationally constrained level, and largely eliminate the backlog of aircraft depot maintenance by the end of 1983.

The budget estimates assume economically justified contracting out savings, totaling 5,200 positions by the end of fiscal year 1982, and an additional savings of 7,600 end strength by the end of 1982. The budget also reflects conversion of civilian commissary positions to contract Government employees, as an economy and efficiency initiative. This effort results in a reduction of 1,000 end strength in 1982 and another 2,000 in 1983.



DEPARTMENT OF THE NAVY
CIVILIAN PERSONNEL
END STRENGTH

CIVILIAN PERSONNEL END STRENGTH
DECREMENTS ASSUMED IN THE BUDGET

	CUMULATIVE FY 1982	IN FY 1983	CUMULATIVE BY END FY 1983
NAVY	5,182	6,892	12,074
MARINE CORPS	84	733	817
	5,266	7,625	12,891

OPPORTUNITY POSITIONS FOR CONVERSION
TO CONTRACT PERFORMANCE

	PREVIOUSLY ANNOUNCED	TO BE ANNOUNCED	TOTAL
DON	23,700	12,000	35,700

CHART 12

CONTRACTING OUT

On chart 12, we look at the contracting out in just a little more detail. It is a major component of the administration's effort to achieve economies and efficiencies. The commercial activities program, implemented by revised OMB Circular A–76, stresses reliance on the private sector for obtaining goods and services when it can be determined that it is more economical to do so.

Budget decrements for anticipated contracting out are based on specific functions which have been, or will soon be, announced for study. Cumulative reduction by the end of fiscal year 1983 of 12,891 civilian end strength is shown. Positions to be studied for conversion to contract performance include 23,700 previously announced, plus 12,000 planned to be announced in fiscal year 1982, for a total of 35,700 positions to be reviewed for potential contractor performance.

The budget realistically assumes that about 35 percent of the positions studied will be found to be economically suitable to be converted to contractor performance.

DEPARTMENT OF THE NAVY
CIVILIAN PERSONNEL
END STRENGTH

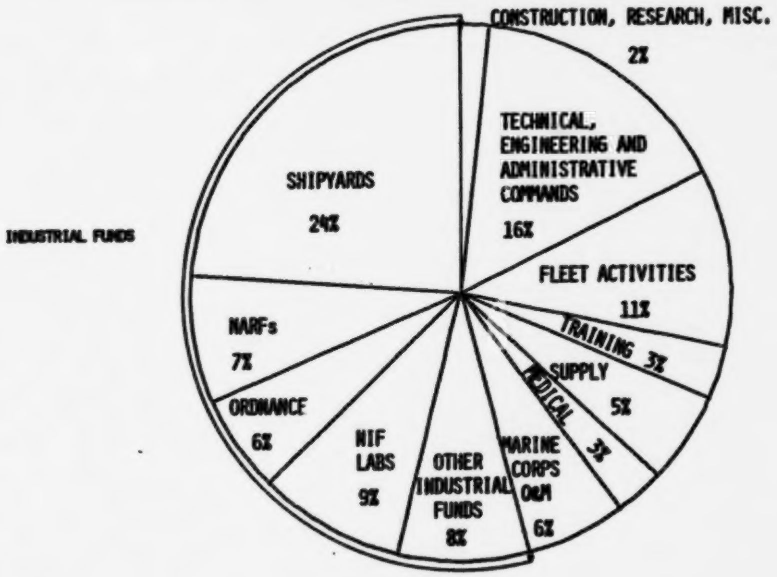


CHART 13

The next chart shows our civilian personnel distribution percentages throughout the Navy. Notice that about 54 percent, which is on the left side, are in the industrially funded activities, such as the shipyards and the NARF's. Many other activities also support readiness, such as fleet activities, training, supply, and medical.

BEST DOCUMENT AVAILABLE

DEPARTMENT OF THE NAVY REVIEW AND OVERSIGHT INITIATIVES AND SAVINGS

- FOLLOW-UP OF AUDIT POTENTIAL SAVINGS - COMPLIANCE REPORTING INSURES ACTION AND VISIBILITY
- AUDIT FINDINGS REFLECTED IN DON BUDGET
- DON REVIEW AND OVERSIGHT COUNCIL
- MORE RAPID MANAGEMENT RESPONSES AND ADJUDICATION OF AUDIT/INVESTIGATIVE REPORTS
- UNDER SECNAV IS MEMBER OF DOD COUNCIL ON INTEGRITY AND MANAGEMENT - CHAIRED BY DEPSECDEF
- SAVINGS INCLUDE:
  - TRAVEL REDUCTION
  - REDUCED CONSULTANT SERVICES
  - TRANSFER OF CONSUMABLE ITEM MANAGEMENT

CHART 14

REVIEW AND OVERSIGHT

If you will turn to my final chart, I would like to speak just briefly to initiatives in the area of review, oversight and savings. We think that the initiatives listed here are especially important in the expenditure of operation and maintenance resources. Our followup procedures for audits mandate that findings and recommendations appearing in audit reports must be acted upon promptly by management. Areas of potential savings identified in audit reports are closely monitored to insure that they are achieved, if at all possible. These savings are then reflected in our budget.

The Department of the Navy Council on Review and Oversight, chaired by the Under Secretary of the Navy, and with principal membership of the Vice Chief of Naval Operations and the Assistant Commandant of the Marine Corps, review results of audits, investigations, and inspections to identify areas needing increased management attention, and to assure that prompt action is taken to correct deficiencies.

We have also instituted a special audit response system that insures action on audit reports. Close cooperation with the Office of the Secretary of Defense is insured by the Under-SECNAV participating on the Department of Defense Council for Integrity and Management. This Council is chaired by the Deputy Secretary of Defense.

And at the bottom we have some examples of the areas in which we have accrued savings in the operation and maintenance accounts, such as in travel reductions, reduction in consultant services, and the transfer of consumable item management to the Department of Defense, where we can get savings because of larger and more efficient procurement.

Mr. Chairman, that concludes my statement.

Senator HUMPHREY. Thank you, Admiral. Your prepared statement will be placed in the record at this point.

[The prepared statement of Adm. Richard A. Miller follows:]

PREPARED STATEMENT OF REAR ADM. RICHARD A. MILLER, U.S. NAVY, DIRECTOR, OFFICE OF BUDGET AND REPORTS—FISCAL MANAGEMENT DIVISION

Mr. Chairman and members of the committee. I appreciate the opportunity to present the Navy's fiscal year 1983 budget and fiscal year 1982 program supplemental request for the Operation and Maintenance appropriations. The Marine Corps representative will address the Marine Corp's Operation and Maintenance appropriations.

Before discussing the details of the fiscal year 1983 Operation and Maintenance request I would like to reiterate and reenforce the statements you've heard from the Chief of Naval Operations and other Navy principals. Whatever size Navy you, the Congress, and the American public decide the country can afford, we are determined to have a first-class Navy. We must have a Navy that is ready, properly equipped, sustainable in combat and manned by trained and competent people. We are acutely aware of the strong competitive demands for the Federal Government's limited resources and have based our fiscal year 1983 budget request on a careful and thorough assessment of the most economic and efficient means to achieve our common objectives. Therefore, we have carefully balanced our resources between readiness, sustainability, modernization and force structure, in order to achieve this Administration's goal of maritime superiority.

Consistent with this determined effort and in consideration of our world wide commitments, nearly one-third of the Department of the Navy budget request is required to operate, maintain, modernize, overhaul and support the fleet. These Operation and Maintenance appropriations finance those operations which have the most direct and immediate impact on the current readiness of the Navy and Marine forces. Table 1 displays the total Department of the Navy Operation and Maintenance request of $24,349 million which is an increase of $2,945 million over fiscal year 1982.

TABLE 1.—DEPARTMENT OF THE NAVY OPERATION AND MAINTENANCE

[In millions of dollars]

Appropriation	Fiscal year—			
	1981	1982	1983	1982–83 change
O. & M., N	$17,786.3	$19,588.6	$22,165.8	$2,577.2
O. & M., MC	1,089.8	1,204.0	1,481.8	277.8
O. & M., NR	548.2	571.1	653,0	81.9
O. & M., MCR	28.6	40.3	48.4	8.1
Total O. & M.	19,452.9	21,404.0	24,349.0	2,945.0

Before proceeding with a more detailed discussion of the fiscal year 1983 budget request I want to review our fiscal year 1982 program supplemental. Table 2 below displays the additional Operation and Maintenance funds requested for fiscal year 1982 which, if not provided, will have to be supported at the expense of readiness related programs such as flying hours, steaming days and aircraft rework. Unfortunately, these types of program represent the only resources which can be drawn upon in the near term to provide financial flexibility.

TABLE 2.—DEPARTMENT OF THE NAVY, FISCAL YEAR 1982 COLUMN OF FISCAL YEAR 1983 REQUEST

[In millions of dollars]

	Previously [1] appropriated	Supplemental	Revised total
O. & M., N	$19,359.5	$229.1	$19,588.6
O. & M., MC	1,178.7	25.3	1,204.0
O. & M., NR	570.9	.2	571.1
O. & M., MCR	40.3	—	40.3
Total	21,149.4	254.6	21,404.0

[1] Includes Transfer & Reappropriations.

A brief description of the various Navy programs in the supplemental are covered below.

FISCAL YEAR 1982 O. & M. PROGRAM SUPPLEMENTAL

Leasat—O. & M., Navy—$58.6 million

As authorized in the fiscal year 1982 DOD Appropriation Act, the Navy signed a contract modification on December 30, 1981 for satellite communication services. The modification provides funds earlier than originally budgeted but the overall program cost is the same. This change was necessary because of delays in the Space Shuttle program. It provides for payment of $67.0 million for these services in fiscal year 1982, which is $58.6 million above the amount which was included in the fiscal year 1982 budget request for LEASAT.

Maintenance of real property—O. & M., Navy—$75.0 million

This increase will allow a further reduction in backlog of maintenance and repair (BMAR) to a projected year-end level of $580 million. This downward trend is in consonance with the Congressionally directed BMAR containment goal of $536 million.

Cost Growth—Utilities—O. & M., Navy—$52.0 million

The rapid growth of utility costs in fiscal year 1981 was unanticipated and created a severe funding problem until the Congress provided relief through supplemental funds. Since fiscal year 1981 base was not updated prior to our formulating the fiscal year 1982 budget request a similar problem now exists in fiscal year 1982. Therefore the Navy requires $52.0 million to fully fund our fiscal year 1982 utility program.

Unemployment Compensation—O. & M., Navy—$11.5 million

Public Law 96-499 requires each federal agency to pay the cost of Unemployment Compensation incurred by state employment agencies for Federal employees after 31 December 1980. The supplemental request reflects the anticipated fiscal year 1982 costs.

Veterans educational assistance program (VEAP) and educational assistance test program (EATP)—O. & M., Navy—$5.1 million

Both of these programs were transferred to the Department of the Navy subsequent to the submission of the fiscal year 1982 budget to the Congress. VEAP transferred from the Veterans Administration and EATP from DOD control. These two congressionally approved recruiting incentive programs are fact of life requirements.

USPS rate increase—O. & M., Navy—$2.3 million

Supplemental funding is necessary to provide for the 11 percent increase on November 1, 1981 for first class mail.

Public health service—O. & M., Navy—$3.3 million

This request is for expected service cost increases resulting from certain public health service facilities becoming Uniform Services Medical Treatment Facilities. This change was directed in a special provision of the fiscal year 1982 Military Construction Autorization Act.

Defense Officer Personnel Management Act (DOPMA)—O. & M., Navy—$7.2 million

The Uniformed Services Pay Act of 1981, as amended, specified that enlisted personnel be provided with the subsistence portion of per diem in addition to their

Basic Allowance for Subsistence (BAS) while on TAD/TDY. No funds were provided in the fiscal year 1982 Defense Appropriation Act for this purpose.

Employee health benefits—O. & M., Navy—$14.1 million; O. & M., Navy Reserve—$0.2 million

The Office of Personnel Management on 31 December 1981, promulgated revised Agency contribution rates for the Federal Employee Health Benefits Program. The rates, effective on the first pay period after 31 December 1981, increased by 11 percent leaving a total underfunded requirement of $14.3 million.

The fiscal year 1983 Navy Operation and Maintenance budget request will now be addressed.

Table 3 presents the O. & M., N budget, by significant program, totalling $22,165.8 million, an increase of $2,577.2 over last year. The fiscal year 1982 pay raise is annualized in fiscal year 1983, but is not reflected in the fiscal year 1982 total; however, the fiscal year 1982 program supplemental is included.

TABLE 3.—DEPARTMENT OF THE NAVY, OPERATION AND MAINTENANCE, NAVY

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Strategic forces	$697.8	$833.4	$1,053.2	+$219.8
Naval forces	2,405.3	2,821.9	3,203.1	+381.2
Ship maintenance/modernization	3,944.5	4,435.6	5,239.5	+803.9
Tactical air forces	1,462.7	1,571.9	1,514.5	−57.3
Aircraft rework	1,398.6	1,479.8	1,649.7	+169.9
Base operations	2,356.1	2,657.4	2,734.5	+77.1
Strategic sealift	139.2	253.2	322.2	+69.0
Other depot maintenance	600.1	789.9	831.3	+41.4
Central supply activities	636.6	734.1	789.8	+55.7
Logistics support	2,015.6	2,262.6	2,567.7	+305.1
Communications/intelligence	573.2	724.8	827.2	+102.4
Training and education	457.8	560.4	614.0	+53.6
Medical	320.3	353.9	387.0	+33.1
Recruiting and advertising	81.1	78.0	93.5	+15.5
Other personnel support	91.9	114.5	127.5	+13.0
Administration	299.2	335.5	362.7	+27.2
Other	121.6	28.2	16.4	−11.8
Industrial fund/stock fund support	184.8	−208.0	−168.0	+40.0
Pay supplemental		−238.4		+238.4
Total	17,786.4	19,588.6	22,165.8	+2,577.2

Although all the programs listed in Table 3 are of vital importance to the Navy, I would like to direct your attention to the first five lines for I believe that they fairly represent the essence of the Operation and Maintenance, Navy appropriation. These items represent nearly sixty percent of the total appropriation request and most directly fund the steaming and flying of our ships and aircraft, as well as provide for their requisite maintenance.

The resources for the support of our ship operations is contained within the Strategic and Naval Forces programs. The funding for this area is as follows:

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Ship operations	$2,253.1	$2,635.1	$2,865.3	+$230.3

The fiscal year 1983 ship steaming profile supports the operations tempo (OPTEMPO) required by the Navy to maintain a combat-ready general purpose and strategic force. The funds provide for essentially the same level of OPTEMPO as in fiscal year 1982 for our deployed forces. A very slight decline in OPTEMPO for non-deployed units will allow more inport time for crews following the long deployments we have experienced over the past several years. The individual fleet OPTEMPO is shown below.

STEAMING PROFILE—OPTEMPO (OPERATING DAYS PER QUARTER)

Fleet	Fiscal year—		
	1981	1982	1983
2d	31.1	31.0	28.5
3d	27.0	27.0	25.3
6th	61.0	52.5	53.0
7th	56.0	56.0	54.0
Average	43.8	41.6	40.2

Real program growth of approximately $174 million reflects support for 15.7 additional operating ship years. Twenty new ships will join the fleet including the third *Trident* submarine, and the battleship *New Jersey.*

Sustaining a high level of operation, improving our operational readiness and modernizing our forces, requires extensive repair, refurbishment and timely overhaul of our ships and systems. The resources devoted to this line are:

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Ship maintenance/modernization	$3,944.5	$4,435.6	$5,239.5	+$803.9

The fiscal year 1983 ship overhaul program provides for the major overhaul and modernization of 66 ships. Funding for the fiscal year 1983 ship maintenance and modernization program increases by approximately $490 million in real terms reflecting an increase of three ship overhauls and a richer mix of ships. Included in this program are twelve nuclear submarines, two aircraft carriers, 34 cruiser/destroyer types, and 18 other ships. During overhaul, repairs and refurbishment of hull, mechanical, and electrical equipments, as well as shipboard sensors and weapon systems are made in order to sustain and improve operational readiness and combat capability. The modernization program emphasizes extensive upgrading of both defensive and offensive capabilities for our aircraft carriers, submarines and surface ships. Without modernization our existing weapon systems would quickly become obsolete and could no longer meet the threat, which is constantly increasing.

The ship maintenance program continues the effort to extend the period between ship overhauls in order to provide additional operational time. The ships which are in these longer cycle programs are scheduled for interim selected repair periods to assure operational safety and reliability. The first attack submarines under the extended operating cycle completed 70 months of successful operations in fiscal year

1979. The intital ballistic missile submarine in this cycle has also completed a major overhaul, following nearly nine years of operation. During subsequent overhauls, the Navy conducts detailed inspections to assess the effectiveness of the program. The results of the inspections so far have been favorable. Due to these favorable results, frigates, cruisers, and destroyers have been placed in extended operating cycles. The first four frigates will complete their cycle and enter overhaul in fiscal year 1982, at which time they will be similarly evaluated.

The number of ships overdue for overhaul will decrease to eleven compared to 16 at the end of fiscal year 1982. The backlog is due to operational constraints.

With respect to aviation programs, the flying hour program in fiscal year 1983 will allow tactical aircrew qualifications to be maintained at a Primary Mission Readiness (PMR) level of 86 percent (includes 3 percent simulator use). The total flying hour program grows by 81,000 flight hours in fiscal year 1983. The funding decrease in the Tactical Air Forces area, indicated below, is due to a reduction in fuel prices:

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Aircraft reworks	$1,398.6	$1,479.8	$1,649.7	+$169.9

Our rework program indicators displayed below, if achieved, are expected to result in an overall mission capable rate of about 62 percent, up from 59 percent in fiscal year 1981.

AIRCRAFT MAINTENANCE

	Fiscal year—		
	1981	1982	1983
Component rework (percent requirement)	96.3	98	100
Airframes on extension (percent)	6	9	6
Bare firewalls (number)	80	80	36
Mission capable rate (percent)	59	60	62

To bring the total O&M,N appropriation into perspective and demonstrate the vital contribution each element makes, I would like to summarize by briefly touching on just a few of the remaining programs.

The $2.7 billion requested for base operations is critical as it allows our shore activities to support the fleet forces in a manner that can sustain a high state of readiness. This funding for shore activities includes maintenance and repair of real property, utilities, engineering services and other base operating support such as administration, transportation, service craft, berthing and messing, morale, welfare and recreation activities, and other Quality-of-Life items.

Without adequately maintained operational facilities such as airfields, performance of various military missions would suffer; without adequately maintained Unaccompanied Enlisted Personnel Housing and other personnel related facilities, habitability and the quality-of-life for the individual would erode; and without adequately maintained utility systems, energy conservation would be impeded. In fiscal year 1983, base operation funds support nearly 250 Navy installations.

The fiscal year 1983 Stragegic Sealift program continues the initiatives begun in previous years. Two ships will be added to the Ready Reserve Fleet for a total of 33; eight SL–7s will be in our inventory; 14 Near Term pre-positioned ships will be on station (this includes one ship for the Rapidly Deployable Medical Facility); our T-AKX efforts will continue, and three additional ships will be available to preposition Army ammunition.

Finally, a brief look at our Recruiting and Advertising program is in order. This program is critical to a balanced manpower plan that leads to a ready and sustainable Navy. The funds requested are the absolute minimum necessary to support a successful Recruiting and Advertising program. As the number of 18 to 21 year olds in our population declines, it becomes increasingly difficult to recruit the high quality people necessary to support our growing military personnel requirements.

This concludes the O&M,N portion of the statement. The Operation and Maintenance, Navy Reserve (O&M,NR) appropriation will be covered next.

OPERATION AND MAINTENANCE, NAVY RESERVE

The fiscal year 1983 Operation and Maintenance, Navy Reserve request totals $653.0 million, an increase of $81.9 million over fiscal year 1982. Much of the increase is caused by the pay raise adjustment and inflation; however, program growth exists particularly in the area of ship maintenance.

Table 4 presents the significant programs within the O&M,NR appropriation. As noted before, the total fiscal year 1982 estimate includes the fiscal year 1982 proposed program supplemental but not the civilian pay raise supplemental.

TABLE 4.—DEPARTMENT OF THE NAVY, OPERATION AND MAINTENANCE, NAVY RESERVE

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Ship operations	$42.1	$53.9	$45.6	−$8.3
Ship maintenance	101	.267.	8140.4	+72.6
Air reserve force	185.7	217.1	202.1	−15.0
Aircraft maintenance	80.4	88.8	95.0	+6.2
Surface support force	2.7	4.9	5.2	+.3
Contractor technical engineering services	8.1	8.6	10.0	+1.4
Base operations	118.2	134.8	146.5	+11.7
Other	9.8	11.0	8.2	−2.8
Pay supplemental/fuel		−15.8		+15.8
Total	548.2	571.1	653.0	+81.9

The following is a brief discription of some of the major programs.

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Ship operations	$42.1	$53.9	$45.6	−$8.3

The operations tempo (OPTEMPO) for the Naval Reserve Force (NRF) of 14 days per quarter remains the level required to maintain acceptable readiness. The fiscal year 1983 NRF ship inventory declines from 43 in fiscal year 1982 to 37. It includes one destroyer, six frigates, 18 ocean minesweepers, six amphibious ships and six auxiliaries. Two additional frigates are programmed in fiscal year 1983. These ships are replacing the old obsolete FRAM I destroyers. Decreased funding reflects lower fuel costs, and a reduced number of operational months resulting from the smaller ship inventory and the increased number of overhauls.

[In millions of dollars]

	Fiscal year—			
	1981	1982	1983	1982–83 change
Ship maintenance	$101.2	$67.8	$140.4	+$72.6

The ship maintenance program encompasses public and private sector overhauls, emergent and scheduled repairs, and modernization of Naval Reserve Force (NRF) ships. The fiscal year 1983 program provides for the major overhaul of 13 ships. This represents a substantial increase over the fiscal year 1982 overhaul program of seven ships. Additionally, increased intermediate maintenance, restricted availabilities, design service support, and the establishment of four Shore Intermediate Maintenance Activities (Naval reserve maintenance facilities) are included as readiness enhancement measures.

[In millions of dollars]

	Fiscal Year—			
	1981	1982	1983	1982–83 change
Air Reserve Force	$185.7	$217.1	$202.1	−$15.0

The mission of the air reserve force is to provide combat ready aviation units for immediate deployment in time of war or national emergency. This program consists of two carrier air wings, two long range ASW patrol wings, one helicopter wing, one air logistics wing and the Fourth Marine Corps air wing. The fiscal year 1983 budget supports an average operating aircraft inventory of 594. Programmed flight hours (212,000) are based on specific training requirements for each type of aircraft and will allow aircrew qualifications to be maintained at a Primary Mission Readiness (PMR) level of 80.6 percent. The fiscal year 1983 program reflects the continued phase out of the C-118 transport type aircraft and minor inventory gains in C-9 and EA-6A aircraft. Net funding decrease stems largely from lower fuel costs.

[In millions of dollars]

	Fiscal Year—			
	1981	1982	1983	1982–83 change
Base operations	$118.2	$134.8	$146.5	+$11.7

Through this program the Naval Reserve units are provided with material, logistic, facility and service support. Areas include maintenance and repair of real property, food service facilities, minor construction utilities, storage and warehousing. Also included are other base operation functions such as communications, security, and housing. The fiscal year 1983 budget reflects increased emphasis on the maintenance and repair of real property, improved management systems and an expanded contract berthing program to support Selected Reserve personnel inactive duty training at sites void of government facilities and beyond a reasonable commuting distance from their homes.

Before concluding this statement, I want to emphasize the Department of the Navy's continuing commitment to effective and efficient resource management. In close cooperation with the DOD Office of Review and Oversight, the Navy has aggresively pursued a Service-wide campaign to reduce fraud, waste and abuse.

The Navy has identified savings which have already been achieved or are specifically programmed through fiscal years 1981–1987 that total over $9.1 billion. Initiatives in our operations area have made a significant contribution to that total. For instance, the Operation and Maintenance, Navy appropriation in fiscal year 1983 has savings of over $245 million reflected in the budget. Lower operating costs from procurement of productivity enhancing equipment, restrictions on travel, and greater use of in-house resources as opposed to consultant services are a few examples of cost saving measures. More specifically, consultant services alone in the O&M,N appropriation was reduced by $126.8 million in fiscal year 1983.

I believe the Department of Navy is making steady and significant progress in fighting waste and inefficiency. Rest assured, we are just as firmly committed to combating fraud, waste and abuse as we are to achieving maritime superiority.

In conclusion, I believe that our budget is properly balanced and represents the best application of resources. Mr. Chairman, that completes my statement on the Operation and Maintenance fiscal year 1982 program supplemental and fiscal year 1983 budget.

Senator HUMPHREY. General Hatch.

STATEMENT OF LT. GEN. HAROLD A. HATCH, DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS, HEADQUARTERS, U.S. MARINE CORPS

General HATCH. First of all, I appreciate the opportunity to be here. I have a prepared formal statement that I request to be entered into the record.

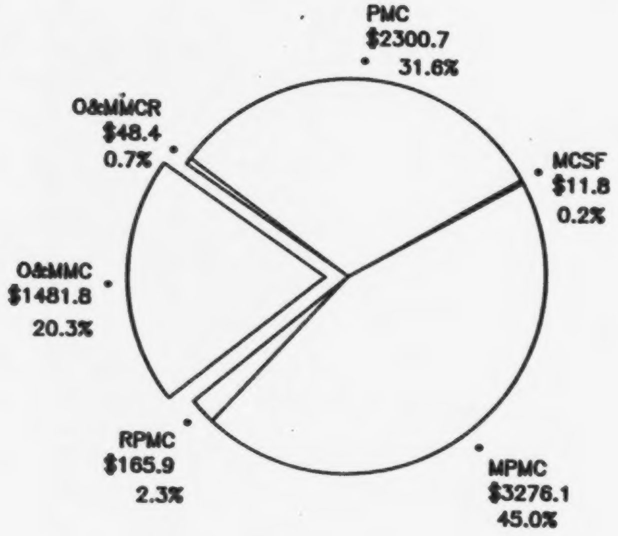
Senator HUMPHREY. It will be placed in the record following your testimony.

MARINE CORPS O. & M. BUDGET

General HATCH. I would like to make a short presentation on the operations and maintenance budget of the Marine Corps using a series of charts, which are attached to the formal statement you have in front of you.

This presentation is designed to show how we are going to apply the operation and maintenance funds to enhance readiness, modernization, and sustainability for the Marine Corps.

FISCAL YEAR 1983 PRESIDENT'S BUDGET



TOTAL $7284.7
($ IN MILLIONS)

On chart 1, I have a pie chart which shows each of our appropriations, Mr. Chairman, by dollars and by percentages. You mentioned the size of the operation and maintenance budget and its proportion to our total budget. This chart displays the proportion as 20.3 percent. I will address that in a little more detail when I get a later chart with some comparative figures for the past year or so.

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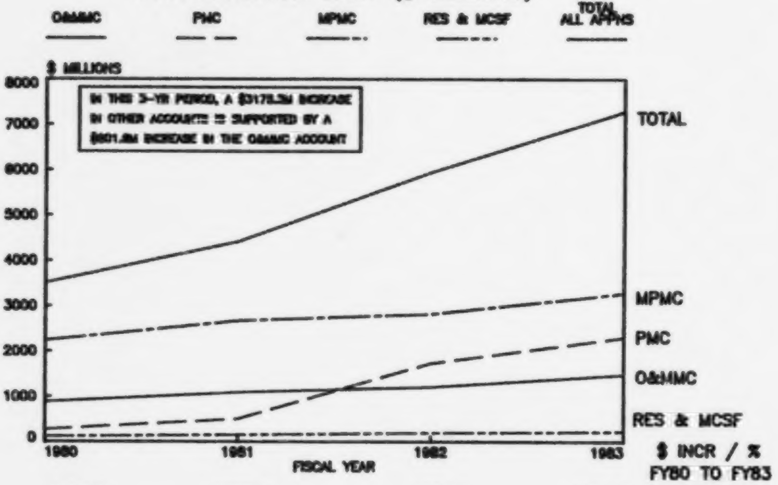
FISCAL YEAR 1983 PRESIDENT'S BUDGET
($ IN MILLIONS)

APPROPRIATION	FY 1981	FY 1982	FY 1983	+/-
MPMC	2,666.6	2,817.7	3,276.1	+ 458.4
RPMC	119.0	141.5	165.9	+ 24.4
O&MMC	1,089.9	1,204.0	1,481.8	+ 280.8
O&MMCR	28.6	40.3	48.4	+ 8.1
PMC	506.0	1,731.5	2,300.7	+ 569.2
MCSF	4.1	13.3	11.8	– 1.5
TOTAL	4,414.2	5,948.3	7,284.7	+1,336.4

The second chart compares fiscal years 1982 and 1983 with the growth between 1982 and 1983 shown. The real growth of the entire Marine Corps appropriation is 11.7 percent from 1982 to 1983. The plus or minus figures you see in the right-hand column, however, do include inflation.

MARINE CORPS FUNDING TRENDS
APPROPRIATION SPLIT ($ MILLIONS)



					$ INCR / % FY80 TO FY83
O&MMC	880.2	1089.9	1204.0	1481.8	601.6/168.4%
PMC	275.1	506.0	1731.5	2300.7	2025.6/836.3%
MPMC	2235.3	2866.6	2817.7	3276.1	1040.8/146.6%
RES & MCSF	117.3	151.7	195.1	226.1	108.8/192.8%
TOTAL	3507.8	4414.2	5948.3	7284.7	3776.9/207.7%

The third chart reflects these same appropriations, to show their growth over the period from 1980 to 1983. In this 3-year period, with a growth in the total budget of about $3.8 billion, we have increased the O. & M. by about $601 million.

The growth in the O. & M. of course, is that which is necessary to sustain the bases and stations, many of which incur fixed costs. The others are those costs that will go to maintain equipment and support the Marines, either the readiness or the sustainability.

We have considerable growth in our procurement appropriation starting in 1982 and continuing in 1983. Three years ago, when I was up here in 1980, about 78 percent of our total budget went to support people, military people and our civilian personnel, which totaled about 20,000. We haven't increased our military pay appropriation that much, but it has dropped from 78 percent in 1980 down to about 45 percent, as noted on the first pie chart. That is really a case of the growth of the procurement appropriation, most of which is either correcting deficiencies that have existed for a long time or replacing equipment, which we call modernization. It isn't technical modernization in the sense that it is a new piece of equipment in most cases, but really a replacement for an artillery piece that is 20 or 30 or 40 years old or a pistol or a truck that is 20 or 25 years old. These items are just not supportable, nor, are they anywhere near what the state of the art should be supporting us today.

So, we feel that we have a balanced budget. As Admiral Miller said many of those things which may require a greater intensity of O. & M. support after they are procured and after they have been fielded, Mr. Chairman, are always 2 and 3 years away. So, we feel this budget is balanced in terms of the O. & M., manpower, and procurement support.

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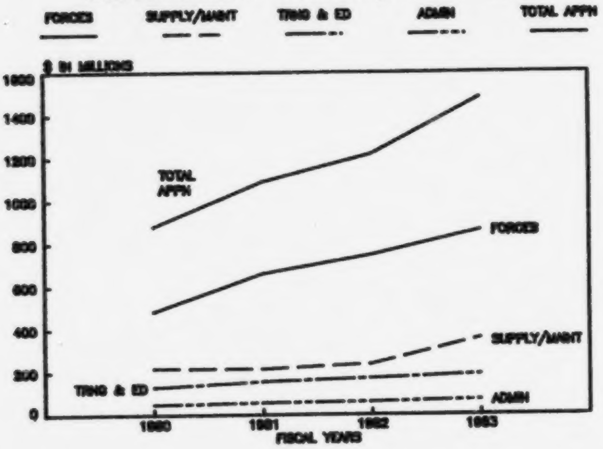
OPERATION AND MAINTENANCE, MARINE CORPS
BUDGET ACTIVITY SUMMARY($ IN MILLIONS)



FORCES	484.7	661.2	742.6	881.8
SUPPLY/MAINT	216.6	215,2	232.8	358.9
TRNG & ED	130.4	156.2	169.9	190.2
ADMIN	48.5	57.2	58.7	71.0
TOTAL APPN	880.2	1089.8	1204.0	1481.8

The fourth chart, which is now talking only to the O. & M. appropriation of our budget, shows the growth by budget activity from 1980 to 1983. The growth is relatively even. The largest growth shows up in supply and maintenance which is $126 million. About 12.5 of that is for inflation, and $113 million is program growth. Large chunks of that program growth are the pre-positioning program, which is almost $40 million, a reduction in the maintenance backlog in our depots for another $31 million, and the installation of modifications on equipment for another $10 million.

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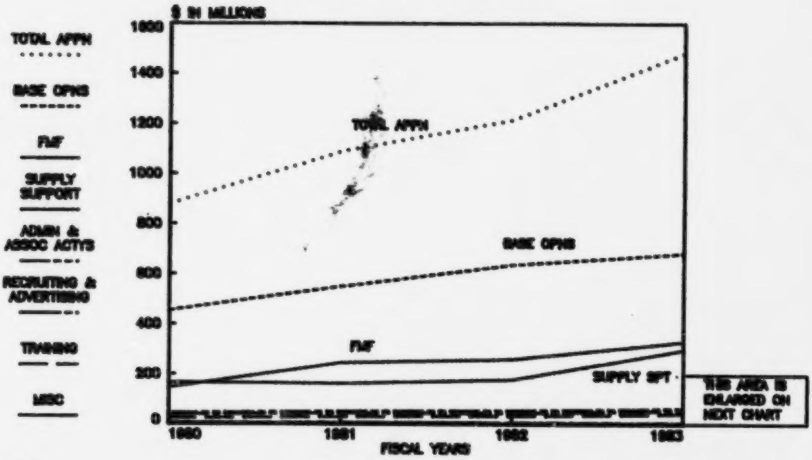
OPERATION AND MAINTENANCE, MARINE CORPS MISSION SUMMARY ($ IN MILLIONS)



BASE OPNS	454.6	550.9	637.2	683.6
FMF	146.6	245.2	259.9	330.6
SUPPLY SPT	166.5	162.0	178.3	297.7
ADMIN/ASSOC	44.9	51.6	55.6	64.0
RECRUTNG/ADVER	38.7	43.8	44.7	56.1
TRAINING	23.6	29.7	34.0	42.1
MISCELLANEOUS	5.3	6.7	7.0	7.7
UNFIN CIV PAYRAISE			−12.7	
TOTAL APPN	880.2	1,089.9	1,204.0	1,481.8

Chart 5 is taking the same O. & M. appropriation and breaking it down in missions, with the total appropriation along the top, then base operations, Fleet Marine Forces, and supply support. As you can see, I have three lines at the bottom that you can't really distinguish. They are broken out separately on the next page.

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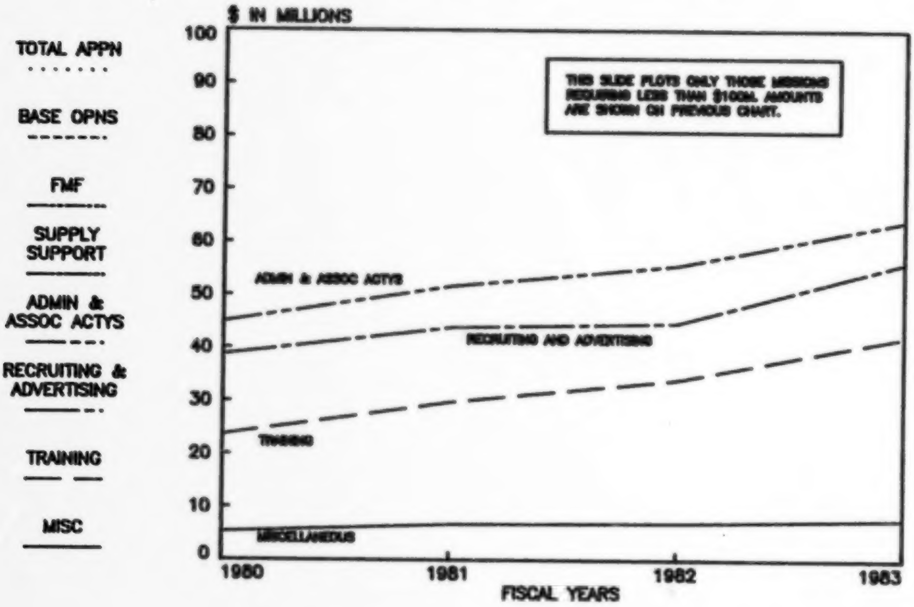
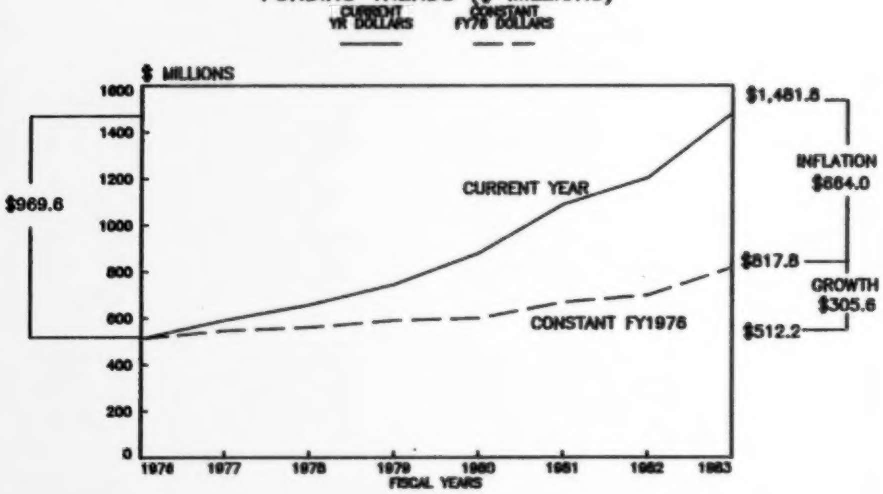
OPERATION AND MAINTENANCE, MARINE CORPS MISSION SUMMARY ($ IN MILLIONS)



I think, again, these will show relatively even growth through all of the different activities or missions that are supported by the operation and maintenance appropriation for the Marine Corps.

OPERATION AND MAINTENANCE, MARINE CORPS FUNDING TRENDS ($ MILLIONS)



CURR YR $s	512.2	591.3	657.5	745.1	880.2	1089.8	1204.0	1481.8
FY1976 $s	512.2	548.1	560.6	590.3	600.0	669.0	699.1	817.8
FY1976 $ INCR	---	7.0%	2.6%	5.3%	1.6%	11.5%	4.5%	16.1%

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If we could move on to chart 7, this shows operation and maintenance account trends over the past 8 years for the Marine Corps, Mr. Chairman, both in constant and current year dollars. I think it noteworthy that of the little over $900 million growth we have, about two-thirds of that is inflation, and about one-third is program growth.

You can see that for the years of the late 1970's and up through 1980 the constant dollars were relatively even. And I might say, it is only through the help of the Congress that they even stayed at those levels, because we were used to coming up here with negative growth. Congress wanted us to either stay constant or show a small level of growth. We appreciate that.

OPERATION AND MAINTENANCE, MARINE CORPS
SIGNIFICANT PROGRAM CHANGES FY82 TO FY83 ($MILLION

	FY81	FY82	FY83	DIFF	INFL	PROG(%)
FMF SUPPORT	227.8	230.2	295.9	65.7	18.2	47.5(19.1)
UNIT DEPLOYMENT	17.4	29.7	34.7	5.0	--	5.0(16.8)
FMF LOGISTICS SPT	104.9	108.3	185.5	77.2	10.4	66.8(56.3)
DEPOT MAINTENANCE	57.1	69.9	112.2	42.3	−3.4	45.6(68.6)
RPMA	309.2	386.2	396.2	10.0	17.5	−7.5(−1.9)
HABITABILITY	25.7	18.1	28.3	10.2	0.8	9.4(49.7)
OTHER BASE OPS	216.0	232.9	259.1	26.2	10.2	16.0 (6.9)
ADMINISTRATION	51.6	55.6	64.0	8.4	1.0	7.4(13.1)
FORMAL TNG & ED	29.7	34.0	42.1	8.1	2.9	6.7(18.2)
RECRUTNG & ADVER	43.8	44.7	56.1	11.3	2.0	7.8(16.7)
OTHER	6.7	7.0	7.7	0.7	0.4	0.3 (4.1)
(MGT SVCS CONTRACTS)	(7.8)	(8.8)	(15.9)	(7.1)	(0.5)	(6.5/69.9)
UNFIN CIV PAYRAISE		−12.7		12.7	12.7	
TOTAL APPN	1089.8	1204.0	1481.8	277.8	72.7	205.1(16.1)

Chart 8 has a lot of figures on it. It shows the 1981, 1982, and 1983 figures. It shows the difference between 1982 and 1983, how much of that is inflation and, how much of it is program growth in the various areas that I have noted down the left side. This is primarily growth that is going to enhance our readiness, our modernization, and our sustainability. On the following page, I will talk only to those portions of this growth that reflects those areas that enhance readiness. But of the $205 million growth at the bottom of the page, the right-hand column, $160 million of those increases are designed to enhance readiness.

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OPERATION AND MAINTENANCE, MARINE CORPS

FISCAL YEAR 1983 ($MILLIONS)

COMBAT READINESS—RELATED INCREASES

	FY82	INCR	FY83
EXERCISES			
NTPS & JCS	15.3	4.2	19.5
AIRLIFT	9.6	3.9	13.5
MATERIEL			
INITIAL ISSUE NEW EQUIP	38.9	15.0	53.9
COLD WX CLOTHING & EQUIP	1.6	10.4	10.4
MEDICAL/DENTAL SUPPLIES & EQUIP	11.0	6.2	17.2
SUPPORT OF NEW EQUIP	5.7	13.0	18.7
SUPPLY SUPPORT PROGRAM	13.3	4.3	17.6
MISSILE MAINT/SURVEY PROGRAM	1.7	0.5	2.3
DEPOT MAINTENANCE OF EQUIP	66.7	36.2	102.9
INSTALLATION OF MOD KITS	3.2	9.4	12.6
LCLS UNIT LEVEL SWITCH		1.0	1.0
LVT7A1 MANAGEMENT SUPPORT	2.5	5.1	7.6
MANPOWER			
UNIT DEPLOYMENT TAD & TRANS	29.7	5.0	34.7
SUPPORT MILPERS END STRENGTH INCR		1.3	1.3
STRUCTURE			
INITIAL ISSUE FOR CSS ACTIVATIONS	2.4	1.5	3.9
LAV PROGRAMS (ILSP, TECH ASST, ETC)		2.3	2.3
ARTILLERY ENHANCEMENT		0.8	0.8
PREPOSITIONING			
NATO (SUP & EQUIP PURCHASE & TOT)	2.1	20.6	22.7
MPS (PURCHASE, PREP & TOT)		18.9	18.9

Chart 9 reflects those combat readiness-related increases. To insure that there isn't confusion, I have pulled the inflation out of these increases. Hence, the totals for the 1983 figures will not relate to other 1983 total figures you might see someplace else. So, I am now addressing only program growth for these particular items.

MARINE CORPS DEPOT MAINTENANCE OF EQUIPMENT

The depot maintenance of equipment is one of our bigger increases. We have gone for a long time with deficiencies in T/E or table of equipment, for field forces. We have had carcasses in the depot that were available for rebuild, but we have just not had sufficient funds to rebuild them. This is an opportunity to enhance that readiness through rebuilding equipment that was available to us, but had not been rebuilt for lack of resources.

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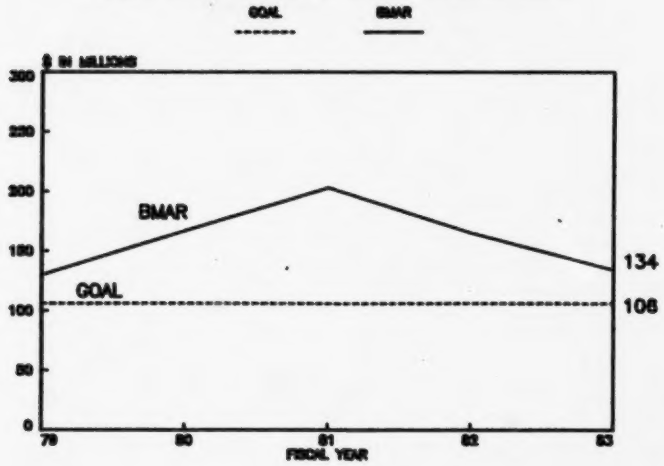
FACILITIES MAINTENANCE AND REPAIR REQUIREMENTS AND BACKLOG PROJECTIONS



PY BMAR	106	130	167	203	165
NEW REQR	145	165	206	185	190
TOT REQR	251	295	373	388	355
$ APPLIED	121	128	170	223	221
BMAR	130	167	203	165	134

On chart 10, I am happy to show that the backlog of maintenance and repair for facilities in the Marine Corps is headed in the right direction. The $106 million line on there is the congressional constrained line. We were moving away from that in the late 1970's and in 1980, capping it in 1981. With the 1982 support of the Congress, that is, approval of an appropriation and a subsequent add-on, that line is headed down in 1982. At the levels we have in here at the present time, it continues to move back toward the containment level. I think the containment level probably is a little high. It was a 1978 level, which Congress said we will not thereafter go above. I believe that a backlog of maintenance that is more appropriate is about one-half of 1 percent of your total account, your total plant property. In our case that would put us down to around $50 million for a backlog of maintenance. But at least it is headed in the right direction.

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MARINE CORPS DEPOT MAINTENANCE PROGRAM
($ MILLIONS)

	FY 1981	FY 1982	FY 1983
REQUIREMENT	85.1	94.2	113.7
PROGRAM	58.3	71.2	113.7
(O&MMC)	(57.1)	(69.9)	(112.2)
(O&MMCR)	(1.2)	(1.3)	(1.5)
BACKLOG	26.8	23.5	0

The 11th chart that I have shows our depot maintenance program. To achieve this, we have had to add 183 people to that activity. It gives us a chance to put a lot of our equipment in condition code A, which is ready for issue, that has not in the past been in that condition.

MARINE CORPS CIVILIAN PERSONNEL END STRENGTH
FISCAL YEAR 1983 PRESIDENT'S BUDGET

	FY1981	FY1982	FY 1983	+/-
O&MMC				
DIRECT FUND	13,484	13,863	14,098	+235
REIMBURSABLE	1,909	1,766	1,819	+ 53
O&MMCR				
DIRECT FUND	142	202	211	+ 9
MCIF	1,318	1,318	1,501	+183
FNIH				
DIRECT FUND	2,825	2,848	2,859	+ 11
REIMBURSABLE	145	149	149	--
TOTAL	19,803	20,146	20,637	+491

The 12th chart shows civilian personnel, which is the Marine Corps' portion of those civilian personnel that Admiral Miller addressed. Our increases for the year 1983 are 1,137 plus the 183 that are industrially funded in the depot maintenance activity, decremented by 733 in the commercial activity studies, and, decremented by another 196 for productivity. That leaves a net growth of 491.

Senator, that concludes the overview I intended to present for the Operation and Maintenance, Marine Corps' appropriation. I am prepared to answer your questions.

Senator HUMPHREY. Thank you, General Hatch.

[The prepared statement of Gen. Harold A. Hatch, USMC, follows:]

PREPARED STATEMENT OF LT. GEN. HAROLD A. HATCH, U.S. MARINE CORPS, DEPUTY CHIEF OF STAFF FOR INSTALLATIONS AND LOGISTICS

Mr. Chairman and members of the Committee: I am Lieutenant General Harold A. Hatch, Deputy Chief of Staff for Installations and Logistics, Headquarters, U.S. Marine Corps. I am pleased to have this opportunity to present to you the Operation and Maintenance, Marine Corps budget request for fiscal year 1983.

During the fiscal year 1981 and fiscal year 1982 Congressional reviews, Congress added funding to the Marine Corps' operation and maintenance requests for emergent unbudgeted requirements. As a result, the Marine Corps has been able to enhance the readiness of its operating forces and to improve the habitability of our supporting establishment. The fiscal year 1982 additional funding will allow us to reduce the backlog of maintenance and repair of real property, to procure camouflage utility uniforms for desert operations and to establish the Inspect and Repair Only As Necessary (IROAN) program for our LVT7 family of amphibious vehicles.

The Marine Corps sincerely appreciates the understanding and the support of Congress in our efforts to obtain the resources needed to train and maintain a highly efficient, effective fighting force.

I an assure you that the Marine Corps is committed to managing its resources frugally to provide our country with that combination that will ensure success in combat.

The Marine Corps' fiscal year 1982 Operation and Maintenance budget totals $1,185.5 million. A program supplemental of $25.3 million, if approved, will provide for fact of life changes and a further reduction to the backlog of maintenance and repair of real property. As a result of this supplemental and an anticipated transfer of $6.8 million to the Foreign Currency Fluctuations Defense Appropriation, the Marine Corps fiscal year 1982 current estimate is $1,204.0 million. In addition, a civilian pay raise supplemental of $12.7 million will be submitted.

The fiscal year 1983 Operation and Maintenance, Marine Corps budget request is $1,481.8 million, a substantial increase over the previous year. This includes $72.7 million for Department of Defense approved inflation increases and $205.1 million net real program growth over the fiscal year 1982 current estimate.

The funds contained in the Operation and Maintenance, Marine Corps appropriation are intended primarily to maintain the combat readiness and rapid deployment capability of two Fleet Marine Forces composed of three Marine Amphibious Forces task organized from three Marine Divisions, Marine Aircraft Wings and Force Service Support Groups. Funds are also provided for Marine detachments afloat and security forces assigned to Naval Stations and other government activities ashore. Shore facilities which support the Fleet Marine Forces include four major ground unit support bases, ten air installations, two recruit depots, two logistics bases, a development and education command, and two landing force training commands.

Combat readiness has always been the hallmark of the Marine Corps. Although operation and maintenance funding is not the only yardstick for readiness measurement and thus cannot be considered in isolation, approximately $159 million of the program growth contained in the budget request is for improved readiness. This readiness-related funding may be grouped in five major categories: exercises, materiel, manpower, structure, and prepositioning.

Recognizing that we must exercise our plans and train our units if we are to maintain the readiness of our forces, we are requesting an additional $8.1 million for increased participation in Joint Chiefs of Staff directed-coordinated exercises; for increased tactical airlift to support combined arms training in mountain and desert warfare; and for exercises to test our plans for the employment of Near Term Prepositioning Ships equipment.

Materiel readiness improvements requested will support the repair, rebuild, and modernization of existing equipment and provide our combat units with the equipment needed to train and, if necessary, to fight. The $101.1 million requested for materiel readiness increases will support a broad range of programs including additional requirements for the purchase of new equipment being fielded in fiscal year

1983. Other materiel readiness items requested support the operation and maintenance of new equipment; additional cold weather clothing and equipment for direct support of our forward deployed forces in the Western Pacific and for training continental United States units at the Marine Corps Mountain Warfare Training Center; acceleration in the purchase of medical and dental supplies and equipment to support the introduction of current medical technology and to provide the medical consumables needed on today's battlefield; increased operating stocks of spare parts and equipment needed to support the Fleet Marine Forces; additional funding to eliminate the backlog of tactical equipment awaiting major repair, rebuild, or modification; increased support for the maintenance and rework of ground antitank missiles; contractual support for the amphibious vehicle service life extension program, and life cycle logistics support of the Tri-Tac unit level switch program.

Manpower programs which directly support readiness require an additional $6.3 million in fiscal year 1983. Supported by this request is Phase VI of the 6-month unit deployment program of Marine ground and aviation units to support commitments in the Western Pacific area. This request will complete a 6-year plan to replace twelve-month unaccompanied overseas tours for a large number of Marines with unit deployments of 6 months in length. The program has successfully reduced personnel turbulence, increased family stability, and allowed greater unit integrity and identity. It has been so well received in our ground combat and aviation communities that we are considering possible expansion of this program into support units in the future. Additionally, we are requesting additional funding to support operations and maintenance requirements concomitant to the military personnel end strength increases requested for fiscal year 1983.

The $4.6 million additional requested to support structure or organizational requirements will provide initial contractual support for the introduction of the light armored vehicle, initial issue of equipment to support the activation of needed combat service support units, and operation and maintenance support needed to support modest enhancements to our artillery structure.

Pre-positioning programs contribute a significant portion of our "increased readiness" program request for fiscal year 1983. An increase of $39.5 million is requested for geographical pre-positioning in the NATO area and the Maritime Pre-positioning Ships program. Both of these programs will materially enhance the Marine Corps' rapid deployment capability.

The quality of life of the individual Marine remains one of the Marine Corps' primary concerns. The gains made in fiscal year 1982 are allowing substantial improvements in living and working conditions thereby enhancing morale and retention and directly supporting enhanced readiness. An additional $10 million is requested to maintain the momentum of these gains in purchasing new personal support equipment such as bunks, desks and other furnishings; modern efficient food serving and preparation equipment to enhance the clean, efficient operation of our dining facilities; and collateral equipment needed to place in operation those facilities scheduled for completion in fiscal year 1983.

The Marine Corps has experienced a decline in civilian personnel end strength for the past several years. In order to adequately support our Fleet Marine Forces we have included in the Operation and Maintenance, Marine Corps request support for a net increase of 299 civilian personnel. The Marine Corps Industrial Fund is also requesting an increase of 183 civilian personnel for our depot maintenance activities.

The planned increases will support the maintenance of equipment at our logistics bases, the modernization of personnel management and disbursing systems at our finance activity; and safety and quality of life functions at our bases and stations. The net considers contracting out of 733 spaces under the Commercial Activities (CA) Program.

Audit savings of $312 thousand have been reflected in our request.

The following displays the trend in Operation and Maintenance, Marine Corps funding from fiscal year 1976 to fiscal year 1983.

[Dollar amounts in millions]

	Fiscal year							
	1976	1977	1978	1979	1980	1981	1982	1983
Current dollars	512.2	591.3	657.3	745.1	880.2	1,089.8	1,204.0	1,481.8
Constant dollars	512.2	548.1	560.6	590.3	600.6	669.0	699.1	817.8
Real growth (percent)		7.0	2.6	5.3	1.6	11.5	4.5	16.1

Although requirements always exceed available resources, the funds appropriated in fiscal year 1982 and those being requested in fiscal year 1983 will significantly contribute to the Marine Corps' ability to remain the Nation's most responsive fighting force with a minimum essential supporting establishment. To the extent that the anticipated cost growth matches the actual price increases, the operation and maintenance appropriation will have the necessary resources to fulfill our mission.

Mr. Chairman, this concludes my formal statement. I would welcome the opportunity to respond to any questions you may have.

Senator HUMPHREY. First, Admiral Miller, will you explain the continued decline in ship-days per quarter? I note that it has dropped from 43.8 in 1981 to 41.6 in 1982 and a proposed 40.2 in 1983.

Admiral MILLER. Yes, sir, Senator. We have a system that we use to measure the proper amount of steaming time, which we call OPTEMPO. The OPTEMPO is broken down into the amount of steaming days that we use for the deployed fleets and the amount of steaming days for the nondeployed fleets. The deployed fleets frequently are carrying out missions and are meeting commitments that are not necessarily particularly conducive to good training. However, they are doing things that have to be done in the national interest such as deploying to the Indian Ocean or showing a presence in other areas of the world and so forth.

So, those particular requirements tend to be dictated. We must steam so many days to meet the national commitments. Therefore, steaming days for the deployed fleets tend to be fixed. And we must to some extent, keep the deployed fleets up where they have been in previous years. There is, however, a very slight decline in the 6th Fleet.

TRAINING FLEETS

The 2d and 3d Fleets are training fleets. The days that are steamed in the 2d and 3d Fleets are the ones that are really the best training days. And, therefore, your question is very appropriate: If we are looking for good readiness, how can we be decreasing these steaming days?

We know that by having the steaming days up in the deployed fleets, its puts considerable burden on our personnel. And we have some of our people who are turning around very quickly from one long cruise to another, particularly in the case of our petty officers. I think you have been told that we have had a shortage of middle management people of about 20,000. So, while the reduction in steaming hours in the 2d and 3d Fleets does give us less actual steaming training times, it does give us an opportunity to give some of these people some well-deserved time in port. So, we think the balance is very good.

We would not like to continue this reduced steaming time over a couple of years. But we do believe we can take this stand-down at this time without any particular degradation of readiness.

Senator **Humphrey**. It seems undeniable that a reduction in steaming days would give you an opportunity for greater training of the kind that you prefer. But isn't that a byproduct? Is that the explicit reason for a reduction in steaming days per quarter, to enable you to conduct more of the kind of training you prefer, or is that a byproduct?

Admiral **Miller**. I don't think that it was a case of one actually following the other. I recall the day that decision was made, and it was after the CNO had made a recent trip to the Pacific and came back and commented that "we are steaming the ships too hard and driving our people too hard. We really ought to look at some reduction and provide more of our training ashore and in their home ports, so that these people can get some relief from their long deployments."

At the same time we were in the middle of our budget review. Our budget is always fiscally constrained. And so, we said, in effect, "Well, if you think that needs to be done, we really have a lot of other places where we can put the money." That is the way it evolved.

Senator **Humphrey**. So, the initial impetus was a concern about straining deployed resources, is that it?

Admiral **Miller**. I think they dovetail together. At that time we were looking at a constrained budget and were trying to determine where that steaming level should be with the dollars we had available.

MARINE CORPS FUTURE YEARS PROJECTION

Senator **Humphrey**. What is the projection in the future years?

Admiral **Miller**. I think the projection for future years is that we would like to, if possible, change the steaming in the deployed fleets to what we would call a "flexible operation," which would provide us the opportunity to not steam the deployed fleets exactly in the manner that we are steaming right now and then, perhaps, to convert some of those steaming days to the nondeployed fleets, and as a consequence get a little better balance.

Senator **Humphrey**. You are saying that the projection is for a further decline in steaming days per quarter in the deployed fleets in future years?

Admiral **Miller**. No, sir, into what we call "flexible operations," which would have for example, a portion of the 7th Fleet homeported in Yokosuka and we would look for an opportunity to have more local operations in that particular area so that our people could have a little more of a rest there.

And then we would look to actually increasing the steaming days in the 2d and 3d Fleets, so that we could have the optimum number of steaming days there.

We concede that we would not like to stay at the level we are at in the 2d and 3d Fleets for a long period of time.

Senator **Humphrey**. You are conceding that the steaming days per quarter for the 2d and 3d Fleets are lower than optimum?

Admiral **Miller**. Yes.

Senator **Humphrey**. For what reason? Why are they lower than optimal?

Admiral MILLER. Well, for the two reasons; No. 1, that there is a recognition that the deployed fleet steaming is heavy, No. 2, we have put our people out on long deployments. We want to give them some opportunity in port, in their home port. And at the same time, it provides us an opportunity to reduce the cost of steaming in the 2d and 3d Fleets. It is a combination of the two, sir.

Senator HUMPHREY. As you know, the charge is being made, particularly with regard to the Navy, that we are falling into the whole pattern once again of spending too much proportionately on procurement and not enough on readiness or O. & M. And that certainly appears to be the case here from this yardstick. When are we going to see an increase in these figures?

Admiral MILLER. Well, we would hope to be able to get on to the flexible operations system this year for the deployed fleets; and, as a consequence, to be able to increase the operations steaming time for the 2d and 3d Fleets next year.

Senator HUMPHREY. How many ships do you have coming in this year? Is it 20?

Admiral MILLER. Twenty.

Senator HUMPHREY. And even with that increase in the number of ships, the steaming days are declining.

Admiral MILLER. Well, of course those ships are going to steam those days. So, actually, it costs us more to have the same number of days with more ships.

Senator HUMPHREY. All right. I see.

Admiral MILLER. There is another subtle point I would make concerning steaming days and OPTEMPO, and that is that it is based on the cost of fuel. So that, depending upon the number and mix of nuclear-powered ships, the cost of operation OPTEMPO—that is, steaming—changes.

Senator HUMPHREY. The figure 20, is that a net figure? What is the net change?

Admiral MILLER. We have 4 going out and 20 coming in, which would be 16.

Senator HUMPHREY. Do you maintain an index; that is, something along the lines of ship-days per quarter? Do you multiply the number of ships per days per quarter?

Admiral MILLER. The total number of ship-days?

Senator HUMPHREY. Yes.

Admiral MILLER. Yes; that can be calculated.

Senator HUMPHREY. That would show a decline as well, wouldn't it?

Admiral MILLER. Yes, sir, it probably would.

FLYING-HOUR PROGRAM

Senator HUMPHREY. Let's go to flying hours. You say that the flying-hour program grows by 81,000 hours in 1983. What is the base? What is the 1982 figure for flying hours?

Admiral MILLER. The base is 1.8 million hours.

Senator HUMPHREY. In other words, I am trying to gage how large an increase 81,000 hours is.

Admiral **Miller**. It is not very large when considering the total program.

Senator **Humphrey**. The 81,000 brings it up to 700,000?

Admiral **Miller**. OK. The total for the entire Department is 1,800,000 hours in 1982 and 1,900,000 or about an 81,000-hour increase in 1983.

Senator **Humphrey**. What was that in 1981?

Admiral **Miller**. 1.7 million.

Senator **Humphrey**. How does that compare with what is needed? What yardstick do you use? I guess this is it right here, primary mission readiness level of 86 percent. What does that mean?

Admiral **Miller**. Primary mission readiness is a factor that we use. It measures only tactical squadrons, excluding all support squadrons. It is based on the requirement for pilot and aircrew training for the tactical squadron: how many flight hours they must fly each month to achieve an adequate level of primary mission readiness.

We have set a goal of 88 percent as to what we would like to achieve, because you have to realize there are certain squadrons that stand down after long cruises and so forth. So, they are not flying. So, 88 percent is our goal.

We are predicting a primary mission readiness of 86 percent in 1983, up from 85 percent in 1982. We also include in there a certain percentage for training that will be done in ground simulators which is approximately 3 percent in 1983.

MAINTENANCE AND REPAIR BACKLOG

Senator **Humphrey**. The backlog of maintenance and repair is shown. What is this figure expressed on your chart 9? Is it the actual backlog?

Admiral **Miller**. Yes, sir.

Senator **Humphrey**. It is going in the wrong direction?

Admiral **Miller**. Yes, sir. It is.

Senator **Humphrey**. How was that decision reached?

Admiral **Miller**. That was based on fiscal constraints.

Senator **Humphrey**. In that case how are priorities set? It seems to me that we have learned a lesson the hard way in this area of BMAR in all of the services. We were beginning to correct that finally, and now we see this backpedaling again. How was that decision reached?

Admiral **Miller**. Well, it was reached in the overall context of putting together the entire Department of the Navy budget with a recognition that the Navy is behind in its total warfighting capability. All requirements for resources were balanced against each other. In the case of real property maintenance, it was felt, when the entire backlog was considered that the increase of $31 million, compared to the total amount, was of a lower priority than some of the other things that need funding in the budget now.

Senator **Humphrey**. It is not only the 31, but it is the other 580 that are sitting there, too, that are considered a lower priority.

Admiral **Miller**. Yes. That is correct.

Senator HUMPHREY. When are we going to see that backlog decrease?

Admiral MILLER. We would hope to try to get it going in the right direction next year when we put the 1984 budget together.

Senator HUMPHREY. How does this affect the Marine Corps? General Hatch, how does your account look?

General HATCH. As you may recall, I think it was my chart No. 10, commencing with the 1982 budget, that showed this. This line reflects a $15 million amount that is in the 1982 supplemental. It is headed down. If that 1982 supplemental is not approved at that level, the dollars applied will have been decreased by $15 million; in other words, we will apply $208 million to that line. But, in fact the $185 million new requirement will still mean it will still be headed in the down direction. The slope will just be less steep is all, and we would hope to achieve the $106 million line in our 1984 budget.

Senator HUMPHREY. Thank you. There is $2.7 billion requested for base operations. How does that compare with 1982?

Admiral MILLER. $2.657 billion in 1982 and $2.3 billion in 1981 is reflected. There is an increase of $77 million from 1982 to 1983.

Senator HUMPHREY. But in real terms that is a net decline. Would you say that?

Admiral MILLER. In real terms I would say, yes, sir. Minus 1.4 percent real program growth.

Senator HUMPHREY. Minus?

Admiral MILLER. Yes, sir, minus $38 million program growth.

CONTRACTING OUT

Senator HUMPHREY. How does contracting out fit in this area?

Admiral MILLER. In the area of base operations?

Senator HUMPHREY. Yes.

Admiral MILLER. Well, Circular A-76 requires that those areas that have potential for contracting out be studied. And once the study is complete, if there is a potential for saving 10 percent of the cost or more, then the service would be expected to contract out that particular function. In base operations, the function would be, perhaps, security guards or janitorial services. It would not have a considerable effect on the total budget for base operations, since funds would still be required to pay the contractor.

Senator HUMPHREY. Going back to the overall O. & M. totals again, what do you calculate as to the real change between the 1982 appropriation and the 1983 request?

Admiral MILLER. The operation and maintenance accounts show a change from 1982 to 1983 in real growth of $1.9 billion. In terms of percentage, it would be a growth of 8.3 percent.

Senator HUMPHREY. OK. So, we have real growth. Where is that going? I haven't had time to scrutinize these items in great detail. But if we are going to have fewer steaming hours——

Admiral MILLER. Well, if you look at chart 7, you can get some idea from those items that have the largest increases.

STRATEGIC FORCES

Senator **Humphrey**. OK. Next, strategic forces. What O. & M. items are under that ?

Admiral **Miller**. This includes the operation and support programs for all of the SSBN's, including the operation of the TACAMO aircraft squadrons. We will have three trident submarines in 1983. There is the mission support for the tridents and their weapons—that is, the rework of the trident missile and weapon system. Regarding the TACAMO squadrons there will be a considerable increase in the amount of flying that will be done. Those are the main features of the growth in the strategic line.

Senator **Humphrey**. And naval forces in general?

Admiral **Miller**. These are the general purpose ships and their related shore and sea support, such as tankers for the Military Sealift Command and so forth. We have significant growth due to the uranium enrichment program that was transferred to us from the Department of Energy, Senator. That is over $100 million. There is a total increase of 15 ship-years that we are supporting in 1983. That is apropos to your earlier discussion of the additional net number of ships that we have. We have an increase in the support of depot level repairables and general purpose test equipment.

There is quite a large increase in the ship maintenance and modernization area. That has to do, of course, with the fact that we have no backlog of ship overhauls, other than for operational reasons. Also, in 1983 we have a very rich mix of ships in overhaul. Among the three additional overhauls that we are going to have, there will be an SSBN and a nuclear carrier and a nuclear cruiser, which are very expensive overhauls.

Senator **Humphrey**. I note you state that the backlog is due to operational constraints. That means shipyard capacity?

Admiral **Miller**. No, sir. It means we need the ship out in the deployed fleets.

Senator **Humphrey**. How close are we to military shipyard capacity, including those civilian yards engaged in military overhauls and construction? Are we anywhere near the constraints there?

Admiral **Miller**. Well, there is no real simple answer to that. First of all, we are keeping our naval shipyards pretty well filled to single shift capacity within ceiling constraints. There is excess capacity in the private sector because of the depressed commercial market. The problem is that most of the capacity in the private sector or a great deal of it is in areas where the capacity is not of the sophistication that we need.

In other words, we have pretty much reached full capacity on nuclear submarine overhauls. But there is plenty of capacity out there to do tugboats.

Senator **Humphrey**. There are some people around here who would like to build more tugboats instead of submarines.

Admiral **Miller**. Yes, sir. I am afraid so.

OPTEMPO

Senator **Humphrey**. What about the OPTEMPO, the Naval Reserve Force, the 14 days per quarter? Is that comparable with steaming days? Is that a comparable figure?

Admiral **Miller**. It is a good comparison. The steaming of the Reserves ships is pretty much tied to the weekend drill and active duty for training periods of the Reserves. So, 14 days per quarter is about right for the crews that we have in those ships. That has been the program level which we have achieved for quite some time.

RESERVE SHIP INVENTORY

Senator **Humphrey**. Why is the Reserve ship inventory declining?

Admiral **Miller**. Primarily because we have some very old destroyers in the Reserves that are being phased out. At the same time we are phasing in some of the 1052 class frigates. The phasing in is a little behind the phasing out. There is some training to be done. There were some new industrial facilities to be set up at the Reserve bases. In the meantime, some of these older ships have gotten beyond the point of economical repair.

NAVAL RESERVE FLYING HOURS

Senator **Humphrey**. What is the total flying hours for the Naval Reserves in 1982 and as projected in 1983?

Admiral **Miller**. I do have that with me, Senator. Could I provide that in just a few minutes?

Senator **Humphrey**. All right.

What I am trying to find out is how large a change? Is 212,000 the base? On page 15 of your statement you state, "Program flight hours: 212,000." Is that for the Reserves?

Admiral **Miller**. Yes.

Senator **Humphrey**. Right at the top, the 212,000, does that represent an increase or decrease from 1982? Do you have that?

Admiral **Miller**. The actual investment in dollars, if you go back to the previous page, which is page 14, is a decrease.

Senator **Humphrey**. Is fuel included in this figure?

Admiral **Miller**. Yes; it includes fuel, however I might comment that in previous years the Reserves have not flown the entire planned program.

Senator **Humphrey**. Why is that? The airplanes couldn't fly? They didn't have parts to keep the airplanes flying?

Admiral **Miller**. They did have some problems, yes. In one particular model of the airplanes they fly, the A-7, they had some engine malfunction problems that required some lengthy overhauls. So they were unable to fly the program. I have now found the flying hours. In 1981 the Reserves flew 209,000 hours. In 1982 they plan to fly 208,000, hours. In 1983 their program is 212,000. So they are increasing in 1982 to 1983.

Senator **Humphrey**. Going back to this problem you had with the A-7's, what was that? Was that related to spare parts, or was that just an anomaly?

Admiral **Miller**. It was just related to the reliability of the engine, and then related to the number of engines that we had to put through overhaul. Reliability was considerably less than we had planned when we had purchased the basic engine.

Senator **Humphrey**. Well, that engine has been around for a long time. Certainly the airplane has.

Admiral **Miller**. They started to have a lot of trouble with the engine in the Reserves.

Senator **Humphrey**. Do you anticipate they will be able to fully fly the 212,000 in 1983?

Admiral **Miller**. Yes, sir. We are planning on them being able to fly that particular program.

Senator **Humphrey**. Senator Levin has joined us. He is the ranking member of the subcommittee. Senator Levin?

Senator **Levin**. Thank you, Mr. Chairman. I know that you have covered some of this ground. I would like to see if we can get a little more detail on some of this. This relates to relationship between the procurement accounts and the O. & M. accounts. You have given us your figure for O. & M. in real growth in 1983, I understand. Could you give us that figure again?

Admiral **Miller**. 7.9 percent was given earlier for the Navy appropriations, that is OTMNR. The total Department of the Navy growth for operation and maintenance was 8.3 percent.

Senator **Levin**. That is real growth?

Admiral **Miller**. That is real program growth.

Senator **Humphrey**. Excuse me, if you would yield a second. On what inflation rate was that based?

Admiral **Miller**. That was based on 6.1 percent. We will check the number again, however.

1983 REAL GROWTH IN PROCUREMENT

Senator **Levin**. What was the real growth in procurement in 1983? Would you know that? Would you know your real growth in procurement accounts?

Admiral **Miller**. In 1983? Yes, sir. The total procurement real growth was 41.8 percent.

Senator **Levin**. What about 1982, do you have the figures in terms of real growth or decline in those two accounts?

Admiral **Miller**. From 1981 to 1982?

Senator **Levin**. Yes; the 1982 over the 1981.

Admiral **Miller**. I don't have those figures, but it was considerable less than that.

Senator **Levin**. And how about 1984 over 1983?

Admiral **Miller**. Well, in 1984, of course, we are in the process of developing our 1984 budget at this time.

Senator **Levin**. But on your 5-year budget, what does it show for an O. & M. increase in 1984 and a procurement increase?

Admiral **Miller**. I don't have those figures with me. Could I provide those for the record?

Senator **Levin**. If you would.

[The information follows:]

Out year TOA and real program growth is displayed below:

TOA AND REAL PROGRAM GROWTH

[Dollars in thousands]

Year	Operations and maintenance			Procurement		
	Current	Constant[1]	Percent RPG	Current	Constant	Percent RPG
1982	21,404,068	22,760,092	5.4	26,665,433	28,487,215	23.3
1983	24,349,015	24,652,625	8.3	40,403,056	40,403,056	41.8
1984	24,859,666	24,309,734	−1.4	37,534,493	35,236,893	−12.8
1985	29,255,920	26,619,727	9.5	47,469,491	41,948,875	19.0
1986	32,001,380	27,782,694	4.4	54,294,715	45,180,480	7.7
1987	34,530,237	28,632,654	3.1	64,900,315	50,796,395	12.4

[1] Includes contingencies.

Note.—Outyear data for O&M TOA is not appoved for release by the Secretary of Defense. O. & M. data includes the O. & M.N., O. & M.C., O. & M.N.R., and O. & M.M.C.R. appropriations. Procurement data includes the APN, WPN, SCN, OPN, and PMC appropriations.

Senator LEVIN. If you could give them to us for the 5-year budget?

Admiral MILLER. Yes, sir.

Senator LEVIN. The real increase in O. & M. and procurement is what we need, so we can see how this relationship continues, if it does. I mean, you got 8.3 percent in real growth for O. & M. and 41 percent in procurement. That obviously shows many significant investments. It will be interesting to see how those two figures relate to each other in a 5-year period. So, if you would give us those for the record?

Admiral MILLER. I will provide them for the record. [See table above.] But I do recall, and I was looking at them just yesterday, there is the phenomenon that in 1984 we go negative in the entire Navy in real growth for both procurement and O. & M., procurement taking a very large decrease. And then in the outyears, going back to real growth similar to the 8.3 and so forth in the outyears.

Senator LEVIN. If you could give us the real dollars, the constant dollars, and the percentage?

Admiral MILLER. Yes, sir.

I have reconfirmed the inflation rate that was used for the nonfuel purchases in the O. & M. account, it is 6.1 percent.

Senator LEVIN. So that if the DOD budget is up 18 percent in real dollars, and not constant dollars, the growth in O. & M. would be actually less than the average growth of the DOD budget this year, because your actual growth would be 13.8 percent? Did I add your figures right?

Admiral MILLER. Yes, sir.

STEAMING DAYS

Senator LEVIN. Let me go back to the steaming days. I know that the chairman has talked to you about steaming days. I am troubled by it. I will try not to be repetitious. If I am, you can just indicate where I am and we will look it up in the record. You have an objective for steaming days for the 3d Fleet of 31.5. And your 1983 budget shows only 25.3. So you are actually 6 operating days per quarter below your objective. You are in worse shape than you were in 1982. Are you happy with that cut in training time?

Admiral **Miller**. Well, as I explained to the chairman, we had two bases for making the decision to cut back on steaming days. One was that, with the shortage of petty officers and the heavy commitments we have, we found that we were steaming many of our ships very hard. I think you probably will recall last year when we had the *Nimitz* in the Indian Ocean for 9 months, and the crew seldom got ashore. It became a tremendous burden.

So, there was a general feeling that if we could provide more training ashore and more inport time when our ships were not deployed, this would be beneficial. At the same time, we were putting together the budget. We were, of course, operating under fiscal constraints and trying to balance out what we were trying to do. So, the judgment was made that since we were going to try to accomplish the reduction and reduce the adverse impact on people, we would do it by reducing the steaming in the 2d and 3d Fleets, and leave the 7th and 6th Fleets pretty much where they were.

Senator **Levin**. But isn't the training time really more involved in the 2d and 3d Fleets?

Admiral **Miller**. Yes, sir. You are absolutely right.

Senator **Levin**. That doesn't create the problem of not getting to port often enough. You can get to port as often as you want, at least more often in the 2d and 3d Fleets than you can in the 6th and 7th Fleets.

Admiral **Miller**. You are right.

Senator **Levin**. Why do we cut the fleets where you can get to ports more often?

Admiral **Miller**. Because we have national commitments to meet in the 6th and 7th Fleets.

Senator **Levin**. It is inconsistent with what you just said. You said one of the problems is that we can't get to port often enough.

Admiral **Miller**. No, sir, we want to get our people back to their home ports.

Senator **Levin**. I see. On those fleets, for the 6th and 7th Fleets, I see what you mean. Do I understand all of that to mean you are not happy with the cut in training days that is caused by fiscal constraints?

Admiral **Miller**. I guess I am not stating it very well. It was a balanced decision. We really wanted to have an opportunity to reduce the impact on our people of some of the heavy steaming. So, we did welcome the opportunity to reduce that time to get them in port, to get them home a little more.

Senator **Levin**. But that doesn't explain the reduction of the 3d Fleet, does it?

Admiral **Miller**. Yes, sir.

Senator **Levin**. And of the 2d Fleet?

Admiral **Miller**. Yes, sir. Because if the person is 9 months out in the Indian Ocean and he comes back and he is back a week and the following week they send him out for another 3 months in the 2d Fleet, why, he has had no time to be with his family at all. There is no opportunity at all to be with the family when you are in the 6th or 7th Fleet. The only opportunity appears in the 2d or 3d. And that is one of the things we tried to accomplish.

Senator **Levin**. Why don't we now reduce the objective? Why do you want to keep an objective that is no longer good? You said it is not good to keep this objective.

Admiral **Miller**. I think we would still like to be able to steam that much, if we could reduce the amount of time we had people away from home port.

As we get more ships in the Navy, Senator, we will be able to have the ones that we have, Senator, go less frequently. You see, as the size of the Navy shrank with no reduction in our commitments, that meant that ships were going every 6 months on long deployments; whereas, when we had a larger Navy they would go once every 12 months or so.

Senator **Levin**. Was that because of a shortage of ships or a shortage of petty officers or both?

Admiral **Miller**. It is a combination of both.

Senator **Levin**. But you maintain the objective until we get the ships? You don't modify the objective? You just say that is our objective, and that is it? You just say when we get the ships, it will make sense: the objective?

Admiral **Miller**. There are other things we are trying to do. We are trying to establish a policy of flexible operations during the deployments, Senator, so that we can perhaps do some of our deployments with fewer ships. But that is something of national policy.

Senator **Levin**. All of which, then, as I understand it, means that given the number of ships that we have, that you are not dissatisfied with the cut in steaming days?

Admiral **Miller**. That is correct for 1983. We would say that we do not want to continue that level for a long period of time.

Senator **Levin**. And that was not cut in order to make funds available for greater procurement?

Admiral **Miller**. It was a combination of two things: we did want to reduce the impact on our crews and at the same time we had the fiscal constraint. We could use that money in other places.

Senator **Levin**. And the other places being?

Admiral **Miller**. It could be anywhere. I couldn't say where the specific dollars went but——

DEPOT MAINTENANCE BACKLOGS

Senator **Levin**. All right. Depot maintenance backlogs. First of all, why don't I ask General Hatch a question first. Is there such a backlog in the Marines or not? We have conflicting reports on that.

General **Hatch**. I was fortunate to get a note that told me that you would probably ask that question. I am not sure what the timing of this "Material Readiness Report" is that reflected the $20.3 million backlog. But because DOD guidance directed us to reduce this backlog to zero, we had to apply the additional resources. And, in fact, it is now at the zero level.

Senator **Levin**. All right. So, I guess, the "1982 Material Readiness Report" showed that is no longer the case?

General **Hatch**. The resources have been applied to bring it down to zero.

Senator **Levin**. Now, Admiral, there is a shortfall, I understand, in depot maintenance in the Navy. Can you tell us what that shortfall is, how many dollars?

Admiral **Miller**. Are we addressing aviation now, Senator, aviation depot maintenance?

Senator **Levin**. Yes.

Admiral **Miller**. Yes, sir. Aviation depot maintenance breaks down into several pieces. There are engines, airframes, and components to be overhauled. In addition, we have a modification program, which is part of the modernization of the aircraft. When an aircraft comes in for overhaul, if not only has its engines and other equipment repaired, it is modernized by the installation of new equipment.

In the budget we have fully funded the repair section, the repair portion. However, there is a shortfall in the modification portion. We know that the efficient practice would be to install the modifications when the airplane is disassembled for repair. So, we know that in execution we will probably have to apply some of the repair funds to the modification program in order to do the total job most efficiently. When that is done, we probably will find, during program execution, that we will have some backlog in aircraft maintenance.

Senator **Levin**. Can you estimate that for us?

Admiral **Miller**. I couldn't really. I know that we have about $103 million backlog in the modification area at this time.

Senator **Levin**. How much in the other area?

Admiral **Miller**. Just in the modification area. In the other area, at the particular time that we put the budget together, Senator, there was a certain requirement for repairs, and we funded that requirement.

Senator **Levin**. You fully funded that?

Admiral **Miller**. Right. Now, as we go into execution and have to fund the modification portion, we will probably end up having some backlogs in the repair area.

Senator **Levin**. Did you make a request for that to cover it fully in the budget?

Admiral **Miller**. We identified requirements in excess of the amount funded in the budget.

Senator **Levin**. What was that request?

Admiral **Miller**. I think it was about $80 million that was identified, Senator, that was not funded.

Senator **Levin**. So, if we tried to put a handle on it to figure out what you are short on it, we could pick $80 million as much as any other figure, I suppose?

Admiral **Miller**. Yes, sir. This is a very dynamic area. It is constantly changing. You have to stop at some point and say, "What is the estimate today?" And then you base your budget request on that level. But, it may change for a number of reasons.

Senator **Levin**. But you made an estimate of $80 million on a certain day?

Admiral **Miller**. Yes.

Senator **Levin**. What is your estimate today?

Admiral **Miller**. It is probably more than that. The modification program alone is $103 million. But there is probably some amount—and I wouldn't know what it would be costing—that would be in the repair area.

Senator **Levin**. Let me just make sure I understand the two figures. The $80 million is now $103 million, or was $80 million the repair shortage?

Admiral **Miller**. The $80 million was the repair shortage. And I might explain that a little bit. We made an estimate of what our requirements will be. It is based on many, many factors. We sent that estimate to the Office of the Secretary of Defense. There was some discussion of whether OSD accepted our calculations, since this is not an exact science. We had to make some parametric judgments.

Senator **Levin**. Well, I am interested in those parametric judgments today, not that I know what a parametric judgment is, mind you. But it sounds imposing to me. Let's try again. The present underfunding, to the best of your knowledge, for the mods is $103 million?

Admiral **Miller**. Yes, sir.

Senator **Levin**. And on the repairs today you don't have it handy?

Admiral **Miller**. No, sir, I don't have a current estimate.

Senator **Levin**. Well, you estimated at one point it was $80 million. So, you can estimate it again, I assume?

Admiral **Miller**. Yes, sir.

Senator **Levin**. I know it is dynamic.

Admiral **Miller**. Yes, sir.

Senator **Levin**. Could you give us an estimate for the record as of the moment?

Admiral **Miller**. Yes, sir.

[The information follows:]

AVIATION DEPOT MAINTENANCE

The aviation depot maintenance budget data submitted to Congress reflects full funding of Navy airframe, engine, and component rework requirements which were validated during the DOD budget review process. The rework-related aircraft readiness indicators (i.e., airframes on extension and bare firewalls) displayed in the budget are based on these validated requirements. The Navy's experience with execution of the depot maintenance program indicates that aircraft rework requirements will probably be higher than those projected at the time the budget was formulated. To the extent this trend continues, the following fiscal year 1983 rework deficits will result.

Potential execution deficits

	Millions
Airframe	$37.6
Engine	36.0
Components	107.0
Support Services	10.2
Total	190.8

Senator **Levin**. And you think it might be more than the $80 million?

Admiral **Miller**. Yes.

Senator **Levin**. So, we can figure there is a shortage there of at least $200 million?

Admiral **Miller**. Yes, sir, including modifications.

STEAMING DAYS

Senator LEVIN. I hate to be so dense, but I want to go back for a minute to the steaming days, because I might as well admit my own limitations. I have problems understanding this. I am thinking about what you said, while trying to follow what you said on repairs and mods. I am also thinking of what you said on steaming days. I am still a little uncertain. So, here we go.

Given the patience of the Chair, I will try again.

You really said three things, not inconsistently necessarily, but you did really say three things. One, we have a shortage of people. We have a shortage of ships. We have a shortage of money in terms of steaming days. Some of the money that we might have put in steaming days, we put in other areas. You cannot identify these other areas. I understand that. I don't want to pressure you further on it. But it seems to me that what you are really saying, which is the bottom line, is even with our shortage of ships and even with our shortage of personnel, if we had more money, we would have put more money into additional steaming days.

Admiral MILLER. I don't think so.

Senator LEVIN. That is what I wanted to find out. Then I am not sure what you meant by saying to put some money into other areas instead of here.

Admiral MILLER. Well, that probably was a bad term. But as we put the budget together, there is a constant balancing of one program against another. And where we have programs that have goals, then one has to make a conscious decision to say, "OK, if we are going to do something else then that is going to result in us not achieving that particular goal."

In this case we have 43 days average as a target that we shoot at, Senator. So we made a conscious decision we are not going to hit that target this year. And at the same time we were saying, "Well, that is not all bad, because we want to give our people an opportunity to have a little more time in port when they are in the 2d and 3d Fleets."

Senator LEVIN. You talk of fiscal constraints. I don't see the relevance of fiscal constraints. It is a ship constraint and a personnel constraint that is driving that 40.2 instead of 30.3.

Admiral MILLER. Well, all right. I will agree with that. I guess I am maybe looking at it from the way the budget officer puts the budget together.

Senator LEVIN. The bottom of that one being that you didn't ask for more money for steaming days than you got?

Admiral MILLER. That is correct.

MAINTENANCE AND REPAIR OF REAL PROPERTY

Senator LEVIN. Maintenance and repair of real property is the next subject I want to talk about. Are you expecting these questions, too? Can I give you a little time to get your thoughts together.

General HATCH. No, sir.

Senator LEVIN. I am switching subjects on you so fast, maybe it is not fair. But anyway, there is a backlog of maintenance. The backlog of maintenance and repair of real property is getting worse, according to this chart. From 1982 to 1983 it has gone up from $580 to $611 million. Is that the same subject we are all looking at together.

Admiral **Miller**. Yes, sir.

Senator **Levin**. This is your chart. Would you agree, at least on that readiness indicator, we are worse off in 1983 than we were in 1982?

Admiral **Miller**. Yes, sir. General Hatch reminded me of one thing I really should mention, though. And that is that in our program supplemental for 1982 we have $75 million of maintenance of real property, which will be applied directly against the backlog. If we don't get the supplemental, the BMAR becomes $661 million in 1982.

Senator **Humphrey**. Admiral, let me ask a question on this score. It strikes me as irregular that BMAR requests be made in a supplemental request.

Admiral **Miller**. The concept of the supplemental in the Department was that we would try and use the supplemental as a means for making up for some of the impacts of inflation that were not properly budgeted for in 1982. If you recall Secretary Weinberger's testimony last year, he said, "I will be back if inflation is greater than we expect."

Senator **Humphrey**. Are you saying that the dollar amount requested in the 1982 supplemental is wholly inflation over the 1982 regular request, cost growth?

Admiral **Miller**. It is not a new program, no. As long as you have a backlog in a program, there is a requirement. And knowing that we underbudgeted for inflation in 1982, the decision was made that it was appropriate then to try to reduce the backlog of maintenance repair with a supplemental request.

Senator **Humphrey**. So, the supplemental request in the area of BMAR is just to make up for inflation since the original request?

Admiral **Miller**. Yes, sir.

O. & M. AND READINESS ACCOUNTS

Senator **Levin**. On at least three readiness indicators we are not where we would like to be. One is in steaming days—regardless of the cause—we are not where we want to be in terms of readiness, whether it is personnel, ships, or fiscal constraint. That is why we are eliminating some of the ships in the readiness reserve. The BMAR, we may or may not be worse off than in 1983, depending on what we do in the 1982 supplemental. But anyhow, we are half a billion worse than where we should be.

And then in the depot maintenance, at least for the Navy, we are not where we should be on that. So, on three of our readiness indicators we are falling down from where we would like to be. Is that generally a fair assessment?

Admiral **Miller**. Yes, sir.

Senator **Levin**. This subcommittee, under the chairmanship of Senator Humphrey, is pushing very hard, as you know, on these O. & M. accounts and readiness accounts. That doesn't mean to the exclusion of procurement or investment accounts. I know that Senator Humphrey feels very strongly about that. I feel less strongly about it in terms of the balance. But I am saying that the committee is very much interested in readiness. And these are three accounts, at least, where we could do better if we have had more money, at least in two of the accounts and maybe even in the third.

So far, so good, Admiral?

Admiral **Miller**. Yes, sir.

Senator **Levin**. One of the problems we have, and we had it yesterday also with the Army, relates to the excess in O. & M. funds, the funds that lapse. We had $120 million lapsing in O. & M. accounts in 1981, which was the last fiscal year we have figures for, I think. Well, that makes sense. Yes.

So, how does that happen? It weakens our position when we are pushing—those of us who believe in assured readiness more than anything, or at least the assured readiness theory—it hurts our case when $132 million in readiness lapses in the O. & M. account.

Can you give us an explanation of how that happens?

Admiral **Miller**. Well, I don't know if I can give you a complete explanation. But it is a huge account of $20 billion, broken down into many, many areas, roughly 1,650 ships, squadrons, commands, and stations. And one certainly does not want to overexpend the account. So, it is necessary to keep something in reserve in case there are some unexpected costs as one approaches the final period of the account.

So, we have to be very careful we don't overexpend. By the time you spread those funds down to many, many claimants, you add it back up again, and you get a number like the $120 million.

Senator **Levin**. So, that is not so much a problem of industrial base or procurement. That is just a problem, basically, of trying to come out even. And you cannot overshoot it?

Admiral **Miller**. Yes, sir.

Senator **Levin**. There is a great variation in the amounts each year. For instance, one year we were down to $12 million and another year we were down to $120 million.

Admiral **Miller**. If you get down to $12 million, the Budget Office gets pretty puckered.

Senator **Levin**. Pretty what? Puckered? That is another term I am not familiar with. Well, OK.

The last question I have goes back to that depot maintenance backlog. I guess this is the second to last question I have. We know it exists to the degree to which you have testified. How is it that the DOD told us on February 8 that there would be no maintenance backlog under this budget? Do you have any explanation?

Admiral **Miller**. Yes, sir. As I told you, we have to take a snapshot at a certain date, a certain period of time. And we say, "This is the amount of requirement that we have identified, and this is what we think it is going to be." So, then, the OSD agrees with us on that day and says, "Yes, that is the amount of requirement that we will agree to and here is the money for it."

Senator **Levin**. Yes. But on February 8, there was a backlog.

Admiral **Miller**. They are talking about the budget when they put it together. They fully funded the budget at the time that the Navy said that they had this particular requirement.

Senator **Humphrey**. I thought you said that there was an $80 million shortage just in one area of the depot maintenance?

Admiral **Miller**. In OSD they did not recognize that $80 million shortage.

Senator **Levin**. You do?

Admiral **Miller**. We said that our calculations came up with a certain requirement, $80 million of which the analysts in OSD said, "We don't like your calculations. We think they are wrong." And, therefore, they did not fund that $80 million.

Also, for the modernization line that we have discussed, we in the Navy said, "Efficiency requires us to do those at the same time. Therefore, that should be counted as depot maintenance." However, in the entire scheme of the Department of Defense they have to divide out modernization and put it to one side. So they then said, "Navy, modernization is not, strictly speaking, maintenance, so it is alright to have a little backlog in modernization."

Senator **Levin**. OK. Is that shown in the chart, your modernizations as being separate? It doesn't show it at all?

Admiral **Miller**. No, sir, it does not.

Senator **Levin**. Are there other readiness indicators not shown in this chart?

Admiral **Miller**. Well, modernization is not a readiness indicator as such.

Senator **Levin**. The depot maintenance is?

Admiral **Miller**. Yes.

Senator **Levin**. That doesn't show here. I am wondering if there are others that don't show.

Admiral **Miller**. Well, the depot maintenance would be percent component rework, airframes on extention, bare firewalls, and the mission capability rate. All four of those can be taken together, and you can say, "They are impacted by aircraft depot maintenance."

Senator **Levin**. OK. So this does show the shortage of the mission capability rate? Is that what that will show? Is that where the $80 million comes out?

Admiral **Miller**. Well, that mission capability rate, while it is impacted by depot maintenance, is also impacted by many, many other things such as the number of personnel we have out in the fleet and the level of spare parts availability.

Senator **Levin**. Well, why don't you show depot maintenance repairs as a readiness indicator?

Admiral **Miller**. Well, the only way to show it in that fashion would be in terms of the level of funding. However, the percent of component rework funded the number of aircraft on extension, and the number of bare firewalls are all readiness indicators for aircraft depot maintenance.

Senator **Levin**. The last request would be that when you give us these readiness indicators, would you give it to us for the full 5-year period? Can you work that out for the full 5 years?

Admiral **Miller**. I could attempt that. I don't know whether we can or not. I am sure that they would be very imprecise, because of the judgments that would have to be made in the outyears.

Senator **Levin**. If you can do it, fine. If you can't, just let us know where you cannot do it.

Admiral **Miller**. Yes, sir.

[The information follows:]

READINESS INDICATORS

It is virtually impossible to establish readiness indicators in the outyears related to the funding that currently exists in the forward planning documents. While estimates could be made, they would be based upon empirical data and best guess of the level of O. & M. funding that will pertain when those outyears become the budget base. There are several reasons why these phenomena exists; future pay raises, primarily wage board increases at Naval Shipyards and Air Rework facilities are not included, only the linear projection of those that have been approved are reflected in the outyears; price indices are included in the budget year decision process, they will change several times as the program year is fine-tuned for budget purposes and lastly, O. & M. follows procurement decisions insofar as support required for weapons systems delivered to the Fleet. During the internal budget reviews, both Navy and OSD, changes will be made that reflect not only current priority decisions but fact of life delivery schedules as well. A poignant example of this is during the fiscal year 1983 budget deliberations there was a last minute decision within DOD to finance all ship overhaul backlogs that were not constrained because of operational reasons.

Each readiness area will come under close scrutiny as we develop the fiscal year 1984 program and budget. During this program development period we will reevaluate our total requirements and reprioritize our funding to achieve what we feel are our desired levels of readiness. Although the information you requested is so imprecise that it is not available for release, rest asssured it is our express intent that no matter what the size of the Navy, it will be a first class and ready Navy.

Senator **Humphrey**. Just one or two last questions, Admiral. What measures have been taken to insure full funding of individual overhauls in a single year, so that from an accounting point of view we can get a better idea of expenses? Are you still splitting them up?

Admiral **Miller**. We are essentially full funding them in a single year, commencing in fiscal year 1983. However, we have frequently experienced growth in the cost of an overhaul, over and above what we budgeted in a single year. I am sure that is what you are alluding to. Our record has not been that great.

Senator **Humphrey**. Is it getting better?

Admiral **Miller**. Yes, sir. I think we have been improving. We have developed new methods for costing. And although we have experienced some very bad examples, such as the *Enterprise*, which recently completed overhaul with considerable cost overruns, our outlook is optimistic.

UNDERESTIMATION OF INFLATION

Senator **Humphrey**. To what extent has the underestimation of inflation by OMB created problems for you?

Admiral **Miller**. Well, I think a good example would be among the items that we have in the 1982 supplemental, for example, the utilities. In 1981 the cost of utilities was underestimated by a considerable amount. It was necessary, then, to come in in 1981 and ask for a supplemental which the Congress gave us to pay the bill. However, while we had the 1981 budget at the lower level, we were preparing the 1982 budget. We used the early 1981 projections as the reference point to prepare the fiscal year 1982 budget. As a result, we find ourselves in 1982 way underbudgeted again. So, that kind of thing is with us.

Senator **Humphrey**. What effect would there be if you were permitted to use more realistic inflation forecasts? Would that have a major effect on the overruns and the need for supplementals, etc.?

Admiral **Miller**. If our inflation rates were perfect, we of course would have a big difference in our program. For instance, we have in our 1983 budget a line in the shipbuilding account, tilted escalation on prior year programs. These funds, which total $209 million, are required to fully fund prior year ships just based on the revised inflation rates.

However, I would like to point out that just in the development of the 1983 budget the OMB has agreed for the first time that the DOD major procurements will utilize special rates. And this is going to be a big help.

Senator **Humphrey**. In your opinion will those special rates fully take into account the extra increments of inflation which have been experienced in this area?

Admiral **Miller**. I really cannot say that I am expert enough to say they fully cover it. The higher inflation estimates allow us to more realistically budget for inflation. Hopefully, the improved procedure will reduce the cost overruns which have plagued us in the past.

Senator **Humphrey**. Do we have a special inflation forecast for industrially funded activities?

Admiral **Miller**. No, sir.

Senator **Humphrey**. Would it be helpful to have one in that category?

Admiral **Miller**. I don't think that is particularly important, because in the industrially funded activities we operate on stabilized rates, so that the programs are unaffected in the year that they are being accomplished.

So, if I am a customer of theirs, I pay the same price for my program all year long. And then at the end of the year, depending on whether the industrial facility lost money or accumulated funds, the industrial fund rates are adjusted in subsequent years. So, of all of the programs that are affected by inflation, I think those accomplished at industrially funded activities are affected the least in that year.

Senator **Humphrey**. I see. How is unit rotation going? How extensive is it and what advantages are showing up?

General **Hatch**. Senator Humphrey, it is going very well. It has now gone to the point where we are in the last phase or sixth phase of it, which means all infantry battalions are rotating. All of the fixed-wing and rotary-wing helicopter squadrons are rotating. It means an individual doesn't change his permanent station, but as a matter of fact rotates for a 6-month period and comes back to his home station where his family is.

For some reason, two 6-month rotations in a 3-year period are not nearly as long as a 1-year separation for 12 to 13 months. It obviously is costing us money. It is costing us an increased amount of O. & M. appropriation. Conversely, it is costing us less money in the transfer of people from permanent stations.

Senator **Humphrey**. Do you have any calculations to determine what the net cost or savings is?

General **Hatch**. No. We have calculations. I don't have those figures readily available. But it is a slight increase. However, we think that our reenlistment rate and all of the quality of life functions are well worth what it is costing.

Senator **Humphrey**. Are you including in those calculations cost savings of having to train new people because of attrition?

General **Hatch**. No, we are not. We are merely making a comparison of what we have paid in O. & M.

Senator **Humphrey**. Those cost savings in the area of recruitment and training of new personnel must be substantial. Are they?

General **Hatch**. They are. You are really talking in most cases about the second and third reenlistment fellow, who is so fed up with overseas stays that he has decided not to reenlist.

Senator **Humphrey**. We have a vote on the floor. I have questions that I will submit in writing. The record will remain open 15 days for submission of answers.

[Questions with answers supplied follow:]

Questions Submitted by Senator Gordon J. Humphrey

SHIP OPTEMPO

Senator **Humphrey**. What is considered the optimum operational tempo in light of requirements for rotation, training, maintenance, etc. What force levels are required to support this OPTEMPO?

Admiral **Miller**. The optimum tempo is 43.6 days/quarter. We have supported this level of OPTEMPO with current force levels; however, as has been pointed out, this has resulted in long deployments with quick turnaround. As we increase our forces to our goal of a 600 ship Navy, the 43.6 days/quarter can be more easily supported and may even be revised upward if necessary.

SHIP MAINTENANCE/MODERNIZATION

Senator **Humphrey**. On Ship Maintenance/Modernization, what measures have been taken to provide for full funding of individual overhauls in a single fiscal year?

Admiral **Miller**. The fiscal year 1983 President's budget incorporates the change in financing for ship overhauls directed by the Ninety-Seventh Congress. The change involves use of the Navy Stock Fund for advance material ordering for public overhaul starts with funding reimbursement in the year of the overhaul, i.e., material for fiscal year 1984 overhaul starts will be budgeted in fiscal year 1984 vice fiscal year 1983. Also, funding previously requested in the follow-on year for change of scope work (change orders) is included in the year the ship overhaul commences starting in fiscal year 1983.

Senator **Humphrey**. What is the content of the overhaul backlog?

Admiral **Miller**. The backlog of eleven ships in fiscal year 1983 consists of one carrier, one nuclear submarine, four destroyer/frigate types, four auxiliaries and one amphibious type.

Senator **Humphrey**. What is the Navy's projected annual requirement for overhauls through the FYDP? What is the projected backlog each year of the FYDP?

Admiral **Miller**. The outyear plan below is currently under review and is subject to change as Navy priorities are evaluated for fiscal year 1984 and the FYDP period. Although the plan shows that backlog declining to zero, it is highly unlikely that this will be achieved for operational reasons.

CURRENT FYDP PLAN

	Fiscal year--			
	1984	1985	1986	1987
Overhaul	77	79	61	66
Backlog	16	5	3	0

AIR REWORK

Senator **Humphrey**. On Air Rework, the Navy required an addition of $170 million from fiscal year 1982 to fiscal year 1983 in order to meet its rework requirements. How are civilian personnel levels adjusted to meet this increased workload?

Admiral **Miller**. Although the funding for Aircraft Rework increases from $1,480 million in fiscal year 1982 to $1,650 million in fiscal year 1983, the prime area of growth is in the area of component rework. Historically, and in fiscal year 1983, a large portion of the component rework program is performed commercially. In addition, the fiscal year 1983 budget does provide for increased civilian manning levels at the Navy Air Rework Facilities.

BASE OPERATIONS

Senator **Humphrey**. On Base Operations, what portion of the $2.7 billion requested for base operations will be contracted out?

Admiral **Miller**. We estimate that approximately 40 percent will be contracted out.

Senator **Humphrey**. What is the growth in this area over fiscal year 1982?

Admiral **Miller**. The growth in this area over fiscal year 1982 is about 10 percent. The estimate assumes that one-half of the cost comparisons scheduled to be performed in accordance with OMB circular A-76 will result in a decision to contract.

T-AKX PROGRAM

Senator **Humphrey**. On T-AKX, what are the Navy's current plans for lease or charter of the T-AKX?

Admiral **Miller**. The Department of the Navy plans to charter 12-15 commercial vessels to meet the requirement of pre-positioning three Marine Amphibious Brigades by fiscal year 1987. A request for proposals was issued in October of 1981. Technical and management proposals were received in January of 1982 and cost proposals in March of 1982. These are currently being evaluated with contract award scheduled for May 1982. It is anticipated that the converted ships for the first of these MAB's will be available for charter in the fourth quarter of fiscal year 1984.

Senator **Humphrey**. Is it the Navy's intention that this program should remain under the O&MN account?

Admiral **Miller**. Because of the advantages of chartering the T-AKX vessels, the Navy plans for this program to remain under the O&MN account. It is anticipated that charters will cost less than outright procurement, although contemplated contract terms will allow the Navy to purchase the ships should future acquisition of the vessels be desired. In addition to being financially attractive, the convert and charter approach for the T-AKX program will improve its chances for success because it broadens the number of potential candidates. This is evident by the fact that over 25 responses were received to the request for proposals.

FLYING HOUR PROGRAM

Senator **Humphrey**. On fuel, by what amount did the Navy under price or over price fuel for flying hours and steaming days during fiscal year 1981?

Admiral **Miller**. Fuel is purchased by the individual Service to support flying and steaming on a stabilized price basis established by OSD. These prices are used in the Services' budget requests. This technique precludes an under or over pricing situation in the operating accounts. To the extent that this stabilized price differs from actual worked or "spot" prices, the difference is reflected in the DOD stock fund which is administered by the Defense Logistics Agency.

SUPPORT OF MODERNIZATION

Senator **Humphrey**. General Hatch, on the Support of New Equipment, how does the Marine Corps track and develop material support requirements for force modernization?

General **Hatch**. The increased cost and complexity of new or replacement weapons systems has impacted significantly on this requirement. These requirements are identified when new procurements/initiatives are submitted during the programming process. Cost elements are reviewed to determine which funding requirements are applicable to a specific principle end item. The following are representative:

(a) Material—repair parts from second through fifth echelon maintenance.

(b) Labor—direct costs associated with military or civilian labor from second through fifth echelon maintenance.

(c) Replenishment Spares.

(d) Petroleum, Oil and Lubricants (POL).

(e) Unit Training Ammunition.

(f) Test Sets and Equipment.

(g) Contract Services.

In cases where the O&MMC support is for replacement items of equipment, the costs identified are those costs which make up the difference between the item being replaced and the replacement item. O&MMC requirements may be tracked to the procurement budget by screening the delivery schedule (P-21) of the Procurement Budget for current capability items and by reviewing the Procurement Annex for future capability procurements.

UNIT ROTATION

Senator HUMPHREY. General Hatch, on Unit Rotation, what savings, or additional costs, have been identified as a result of unit deployments to the Western Pacific?

General HATCH. From a budgetary point of view, the Unit Deployment Program has been implemented at little or no additional cost to the Marine Corps. When transient manyears savings are included, however, the savings are dramatic. Additionally, with Permanent Change of Station (PCS) costs rising at a more rapid rate than per diem and transportation costs combined, it would appear that the Unit-Deployment Program will continue to provide a slight cost savings over the PCS method of staffing Western Pacific units. A unit deployment is generally considered a motivational experience. Whether this is the single contributing factor to the higher retention rates encountered by deploying units of the Marine divisions is uncertain. It is believed that other factors influence the statistic, such as personnel transfers of likely-problem individuals or non-performers prior to, or immediately after a deployment. A comparison of retention rates between deploying units and non-deploying units of the 3d Marine Aircraft Wing and 1st Marine Division indicates that deploying units of the division have experienced higher retention rates than their non-deploying counterparts. In the Wing there is no discernible difference. Consequently, the results are inconclusive at this time. Therefore, we have not factored in any cost savings attributable to reduced accession and recruit training costs. Our net savings across the O&M and the manpower accounts has been estimated to be $6.7 million in fiscal year 1981, and $5.5 and $7.4 million in fiscal years 1982 and 1983 respectively.

NORWAY PRE-POSITIONING

Senator HUMPHREY. General Hatch, on Pre-positioning, what are current plans for pre-positioning in Norway? Identify time schedule, burden sharing, and annual recurring cost issues.

General HATCH. The Marine Corps continues to plan for the pre-positioning of selected unit equipment [deleted] to support an airlifted Marine Amphibious Brigade (MAB) deploying to Norway. Budgeting for this program commenced in fiscal year 1981 and programming continues through fiscal year 1988 and beyond.

The time schedule for this program is funding dependent; consequently, a program completion date has not been established. Initial deliveries of materiel (items purchased with fiscal year 1981, 1982 monies) is planned for September 1982. Total program deliveries will occur one to two years following the year of completed program funding.

The Memorandum of Understanding (MOU) signed January of last year tasked the Government of Norway to provide, through NATO infrastructure procedures, adequate pre-positioning facilities and airbase reception facilities.

A Norwegian host nation support unit (equipped and manned from Norwegian resources) supports the MAB upon arrival. This unit includes 150 over-snow vehicles, 180 trucks, 35 ambulances, 6 refuelers, and selected engineer support equipment.

Additionally, Norway assumes responsibilities for security and general maintenance of pre-positioned equipment and supplies. Negotiations are underway to complete a Bilateral Storage Agreement finalizing financial arrangements for costs not addressed within the MOU—required equipment modifications, maintenance resulting from USMC training exercises.

Recurring costs, once the materiel is on site, is required to support normal in-storage operations (not funded by Norway) plus TAD costs for technical inspections and equipment modifications. These costs are estimated at $6.3 million (fiscal year 1983 constant dollars).

CONTRACTING OUT

Senator **Humphrey**. General Hatch, on Contracting-Out, what amount of the O&MMC budget will go towards contracting out of commercial activities?

General **Hatch**. The Commercial Activities Program has identified requirements for the following O&MMC dollars ($000) to support conversion of military billets to either civilian or contractor performance based on the results of cost comparisons:

Fiscal year:	
1983	1,990
1984	42,518
1985	168,696
1986	263,700
1987	266,208

These funds are programmed; however, an accurate estimate of the precise amount that will be utilized is directly proportionate to the completion of announced cost comparisons. Due to the lack of trained personnel, the number of cost comparisons completed to date is rather insignificant when compared to the number planned for completion in fiscal year 1983 and the ensuing out-years.

CONTRACTING OUT TRENDS

Senator **Humphrey**. What are past and projected trends in this area?

General **Hatch**. The Marine Corps has had difficulty in the past in meeting our contracting out goals, primarily due to a lack of resources to effect studies. The Marine Corps has received a one year restoral of the end strength reduction programmed for fiscal year 1982. The fiscal year 1983 President's budget contains an ambitious contracting out goal of reducing civilian end strength by 733. The following data depicts the current status of announced Marine Corps Cost Comparisions:

	Civilian	Military
Positions identified for study:		
Fiscal year 1979	608	465
Fiscal year 1981	365	74
Total	973	539
Results to date: Cost comparisons completed (cumulative through February 1982):		
Contracted out	53	12
Remained in-house	282	5
Total completed	335	17
Cancelled (to be rescheduled for study at a later date)	95	412
Currently under study	543	110
Total	973	539
Potential announcement to Congress—Fiscal year 1982	3,000	300

NUMBER OF ACTIVITIES CONTRACTED OUT

Senator **Humphrey**. What are the Corps plans for increasing the number and type of activities that are contracted out?

General **Hatch**. The Marine Corps does not have a goal to increase the number and type of activities contracted out as such. The Marine Corps will complete cost comparisons in accordance with an ambitious 5 year review schedule of all Commercial Activities (CA) Marine Corps wide.

The results of that review will determine the activities to be contracted out.

TRENDS IN O. & M.M.C.

Senator **Humphrey**. General Hatch, what are the past and projected trends in the portion of the Marine Corps budget dedicated to O.&M.?

General **Hatch**. In fiscal year 1979, our Operation and Maintenance appropriation accounted for about 23 percent of our total budget. That percentage grew to approximately 25 percent during fiscal years 1981 and 1982. The growth in the procurement account resulted in the operation and maintenance account's share falling to 20.3 percent in this budget request. While future program growth is expected, the percentage of the total Marine Corps budget cannot be determined with any degree of certainty.

O. & M.M.C. SHORTFALLS

Senator HUMPHREY. General Hatch, on Shortfalls, what shortfalls remain in O&MMC requirements?

General HATCH. The Marine Corps has made every effort to submit a balanced budget that will meet our requirements for enhanced readiness, sustainability, and quality of life. While we still have deficiencies, these requirements are best satisfied through orderly procurement. What the Marine Corps needs is your support for this level of funding, this year and in future years.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY ADMIRAL MILLER

UNOBLIGATED BALANCES

Senator LEVIN. Admiral Miller, on Excess O. & M. Funds, at the end of fiscal year 1981, the last complete fiscal year, over $322 million in the O. & M. accounts DoD-wide lapsed. The Navy had over $120 million in unobligated balances lapsing in its O. & M. accounts. These figures represent budget authority appropriated by the Congress which the Navy and the other Services consequently reverted to the Treasury.

In the case of both the Navy and the other Services, the amounts in unobligated balances lapsing in fiscal year 1981 are significantly higher than in previous fiscal years.

Why was the Navy unable to use all of the money appropriated in fiscal year 1981?

Admiral MILLER. With respect to the O & MN unobligated balance of fiscal year 1981 which was $114 of the $120 million, and its appearance of being inordinately high when compared with fiscal year 1980, I wish to offer a point of clarification. The fiscal year 1980 unobligated balance was $92.4 million, 0.63 percent of enacted amount. The reapplication of that balance against 3732 contract authority, invoked to cover increases in fuel prices, could contribute to a perception of zero, or no unobligated balance. Also, when an adjustment of –$27.5 million is effected against the fiscal year 1981 balance for required transfer to the foreign currency variance account, the resultant value is $87.0 millon, 0.49 percent of enacted amount which included a $3 billion growth over fiscal year 1980. Therefore, with such adjustments our fiscal year 1981 performance actually was more favorable even though the total appropriation availability was considerable more than for fiscal year 1980.

Senator LEVIN. Does this mean that the O. & M. accounts are growing faster than the Services can realistically obligate?

Admiral MILLER. No sir, I believe that our recent performance demonstrates a responsible effort in assuring that unobligated balances are kept to the minimum level possible.

UNOBLIGATED BALANCES

Senator LEVIN. Going back to fiscal year 1978, the Navy has been unable to efficiently use all the fiscal O. & M. funds appropriated, and these funds lapsed as follows: fiscal year 1978—$40 million; fiscal year 1979—$42 million; fiscal year 1980—$9 million; and the fiscal year 1981 figure of $120 million. The total is $211 million.

I know this does not seem much in a multi-billion dollar O. & M. budget, but it is a lot to my constitutents, and whenever even cuts of such relatively small amounts are proposed by Members of Congress, the Services certainly create a great hue and cry.

Why shouldn't this committee, based on this past experience, reduce your O. & M. accounts by $100 million fiscal year 1983 in anticipation of similar unused funds?

Admiral MILLER. A reduction associated with our obligation experience could only be effected at the expense of program requirements. On the basis of historical experience, the percentage of our obligational authority balance as related to amounts enacted by the Congress would not be influenced by such action. As previously indicated, compliance with congressional intent and law is uppermost in our minds and all responsible officials want to ensure that their accounts are not overextended.

UNOBLIGATED BALANCES

Senator **Levin**. How much of the unused funds in these years is attributed to late receipt of appropriations from Congress in the form of supplementals:

Admiral **Miller**. Supplemental requests of the past few years have reflected, primarily, our inability to fully anticipate significant cost growth changes in prices of fuel and purchased services. However, during the execution of related programs the impact of these nondiscretionary cost increases, including pay raises, is being experienced and is included in obligations placed on the books. Thus, the receipt of enacted supplemental funds for such increases in the latter half of a fiscal year should not appreciably affect our obligations for the year.

Senator **Humphrey**. The hearing is adjourned.

[Whereupon, at 11:45 a.m., the hearing was adjourned, subject to the call of the Chair.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

WEDNESDAY, MARCH 3, 1982

U.S. Senate,
Subcommittee on Preparedness,
Committee on Armed Services,
Washington, D.C.

AIR FORCE OPERATION AND MAINTENANCE

The subcommittee met, in open session, at 10:10 a.m., in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senator Humphrey.

Staff present: Michael B. Donley, professional staff member; Ralph O. White, research assistant; and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator **Humphrey**. Good morning. The subcommittee meets today to receive testimony concerning the Air Force Operation and Maintenance request for fiscal year 1983. We are pleased to have with us Brig. Gen. Daniel Geran, the Air Force Deputy Director of Budget for Operations.

The subcommittee's interests in today's hearing can be summarized in three areas. First, we must have a clear idea of pending changes in Air Force structure and their net effect on the O. & M. budget.

Second, we hope to identify the fact-of-life changes in the O. & M. budget that will accompany Air Force initiatives in other areas, such as procurement.

Finally, we will want to assess the Air Force's progress in improving flying hour and training programs, and reducing maintenance backlogs and other deficiencies; and, in general, the ability of the Air Force to apply O. & M. resources in a manner that will provide tangible improvements in readiness.

General Geran, how do you propose to proceed?

General **Geran**. What I would like to do first is introduce my colleagues and then proceed with a short overview of the budget from some three or four charts that I am going to present on the screen.

Then also, if I could, sir, I would like to submit a longer version of the statement for the record.

Senator Humphrey. Fine, your prepared statement will be made a part of the hearing record.

[See prepared statement of Brig. Gen. Daniel P. Geran, p. 2996.]

STATEMENT OF BRIG. GEN. DANIEL B. GERAN, DEPUTY DIRECTOR OF BUDGET (OPERATIONS) COMPTROLLER OF THE AIR FORCE, ACCOMPANIED BY CHARLES D. McELHANON, CHIEF, MODIFICATION AND OPERATION AND MAINTENANCE PROGRAMS DIVISION, DIRECTORATE OF LOGISTIC PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF, LOGISTICS AND ENGINEERING; COL. RICHARD L. BINFORD, DEPUTY DIRECTOR, MANPOWER AND ORGANIZATION, DEPUTY CHIEF OF STAFF, MANPOWER AND PERSONNEL; AND COL. DEAN A. HESS, JR., CHIEF, PROGRAMS AND INITIATIVES GROUP, DIRECTORATE OF OPERATIONS, DEPUTY CHIEF OF STAFF, PLANS AND OPERATIONS

General Geran. Mr. Chairman, I am happy to have the opportunity to present an overview of the Air Force fiscal year 1983 O. & M. request.

On my right I have Mr. Mac McElhanon who is our logistics expert; then I have Col. Dean Hess who is Operations, and Col. Dick Binford who will handle all the manpower questions.

Senator Humphrey. All right, sir.

General Geran. So, what I would like to do is just give you an overview of the fiscal year 1983 O. & M. program, sort of compared with 1982 so we can start from a common baseline.

TOTAL AIR FORCE O. & M., FISCAL YEAR 1982–83 INFLATION AND PROGRAM GROWTH

[Dollars in millions]

	Fiscal year 1982	Inflation	Program growth	Fiscal year 1983
O. & M., Air Force	$16,124	$683	$1,138	$17,945
O. & M., Air Force Reserve	670	19	77	766
O. & M., Air National Guard	1,648	50	64	1,762
Total	18,442	752	1,279	20,473

On my first chart I represent the total program. I split it out into active Air Force and then Reserve and Guard.

Senator Humphrey. Permit me to interrupt you as we go along. Since there are no other members present, we can be a little bit unstructured here.

What is the real growth in total O. & M. Air Force in 1983 over 1982?

General Geran. Real growth is about 4.9 percent, sir, the way we have it computed now. I will show you that as we go through, we will see where the dollars change.

Senator Humphrey. All right.

General Geran. There are some anomalies in that and I will point these out.

Senator Humphrey. What was the growth between 1981 and 1982, real growth?

General **Geran**. From 1981 to 1982, let me see. I think again it was, the way Mr. McElhanon has it figured, about 3.4 percent.

Senator **Humphrey**. So, the curve is upward in 1983.

General **Geran**. Yes, sir. It will stay stable, I think, in the outyears. It may drop down a little bit.

Senator **Humphrey**. What are you projecting under the 5-year plan, do you have something?

General **Geran**. We average about 3 or 4 percent per year. In the outyears it shows an increase over that. When you get out to the 1986 and 1987 timeframe, that gets a little squirrely. So, I am not sure.

Senator **Humphrey**. I understand, but there are some in Congress who contend that O. & M. is going to be suffering because of excessive procurement. But your real growth has been rising in the last 2 years. How do you characterize it in the next several years?

General **Geran**. We will keep about the same amount in real growth, around the 3- to 4-percent area. If I could, sir, I would make one comment on the O. & M., R. & D. and the rest.

O. & M. is, let me say, sort of a peculiar account because if your forces remain static, in other words, if you do not increase manpower or end strength, or you do not add aircraft, or you do not add flying hours, those things that would drive the account, the only thing you have to accommodate in O. & M. is inflation. If you can pin down the true inflation cost, then the O. & M. budget ought to remain static as you proceed in the outyears.

However, we do have a flying hour build, as you know. We add some PAA aircraft. We have some manpower adds in total, although we are reducing in civilian end strength. So, we have some slight force changes and we are also going to increase wings in the Air Force as we proceed in the outyears.

So, there should be some minor growth in O. & M. real growth, I would say, to accommodate that force change.

Senator **Humphrey**. Yes.

General **Geran**. We think that in reality we do have a balanced program. As you bring on B-1's and MX's, and change out the strategic force and you get those forces on board, then I get a little concerned that we need to be sure we maintain enough O. & M. to accommodate that force change.

Senator **Humphrey**. You are satisfied in that respect with the 1983 submission?

General **Geran**. Yes, sir, I am satisfied in that respect for 1983 and, as we look at 1984 right now—we are in the midst of our POM development of the 1984 program—it looks like it is reasonable there also.

Senator **Humphrey**. What percentage of the total Air Force budget is O. & M., and do you have that for comparative years?

General **Geran**. Yes, sir. This year it is 26 percent, about. Last year it was about 28.7 percent. So, total wise it is coming down.

Senator **Humphrey**. Right. That is the statistic that worries some, and on first glance it is a little disturbing. But then I think we must realize that some very expensive force modernization programs are being undertaken which were deferred in recent years.

While O. & M. as a percent of the entire high is diminishing, apparently, it is nevertheless increasing in real terms. You have expressed some concerns about whether it will be adequate in the outyears as some of these new systems come into the force.

General **Geran**. Yes, sir, I am worried about that because the outyears get very cloudy on us. There are people within the Air Staff that argue that O. & M. is overfunded now, if you will. We think it is balanced overall. We are satisifed with that program. I just hope we can maintain that balance as we proceed in the outyears.

Senator **Humphrey**. All right, thank you.

RESERVE AND GUARD FORCES

General **Geran**. Yes, sir. If I could go onto the first chart—what I will do is address the Reserve and Guard briefly. I understand you are going to have both General Bodycombe and General Conaway over here later. So, I will just touch upon those, and then in the next chart I will expand and go on in some detail on what happens to the active Air Force O. & M. account.

If you will, on the Reserve Forces we have a real growth of about $77 million for Reserve Forces. That is mainly involved in conversions that have occurred last year and on-going conversions now. We have changed some F-4's, we are changing some C-123's for C-130's, that kind of a thing. That drives about $30 million of that real increase.

The other $40 million increase is really involved in increased activity. We are increasing the numbers of Reserves in the Strategic Airlift area. Right now they accommodate about 49 or 50 percent of our Strategic Airlift. They are the crews that fly those airplanes—they and the Guard.

So, we are increasing that activity. We are increasing flying hours. We are adding the KC-10 and pick up some flying hours there. So, all in all with the DPEM depot purchased equipment maintenance, or the way we accomplish our depot maintenance on the aircraft, that drives the other $40 million.

In the Guard area the same sort of a story holds. It is a conversion kind of thing. We converted aircraft in 1982. We are going to do more of that conversion in 1983. We annualized the cost, we have an increase in operations, increased purchased equipment maintenance again, and that accommodates that $65 million worth of growth that we have in the Guard forces.

Also, I should comment slightly on manpower increases. We have about a 3,000 increase in military end strength in the Reserve and about 1,500 added military end strength in the Guard that is also involved in the growth.

I also should add that the Guard picks up three additional bases. We picked up Kingsley, Duluth, and Hancock Field, those were conversions.

Again, in total we have about $20.5 billion in the 1983 account. As you look at total Air Force, that compares to a program of about $78.3 billion, so we are about 26 percent of the total.

On the next chart I will now get into the Active Force and I will try to describe what has driven those changes, and I will try to address each one as we go through.

O&M, AF COMMODITY COMPARISON

[Dollars in millions]

Commodity	Fiscal year 1981	Fiscal year 1982	Inflation	Program growth	Fiscal year 1983	Percent growth 1982–83
Civilian pay	$2,970.9	$3,008.2	$168.5	−$19.1	$3,157.6	−0.6
Travel and transportation	954.9	1,163.7	21.8	73.7	1,259.2	6.2
Utilities and rents	402.0	512.4	25.4	7.0	544.8	1.3
Communications	358.5	399.0	20.4	23.7	443.1	5.7
DPEM	2,220.8	2.471.5	111.2	230.7	2,813.4	8.9
Purchased services	3,325.0	3,801.6	247.0	700.8	4,749.4	17.3
Aircraft POL	2,636.0	2,795.1	−46.1	4.5	2,753.5	.2
Supplies and equipment	1,760.3	1,852.9	130.7	105.2	2,088.8	5.3
Other expenses	113.8	119.8	3.7	11.4	134.9	9.2

Before I actually get into the chart, end strength in the Air Force, the Active military end strength, has gone up by about 19,200. We have gone down in civilian end strength, and that shows that decrease in that first line where real growth goes down. We drop in the O. & M. account about 2,700 spaces, drop total Air Force about 4,400 spaces in civilian strength.

Flying hours go up, we add about 4 percent to our flying hours, about 93,000 flying hours increase in the account. We increased fuel accordingly, although fuel does not go up as much as flying hours because of the change in the mix of aircraft and directed price for fuel.

Unit aircraft go up again slightly. In DPEM we are going to reach a zero backlog in 1982. We hope to hold that backlog in 1983. Then, we are also trying to attack our backlog in maintenance and repair and we are showing some increased activity there to try to bring that down. So, there is some increased money in facility projects.

TRAVEL & TRANSPORTATION

We have already addressed the first one. Travel and transportation shows about a $70 million increase, about a third of that is involved in the increased activity of TDY—two schools kinds of things, in addition to professional training; two-thirds of the account is involved in transportation rather than travel, if you will—that is second destination transportation where we ship things out to our field units. We also have some increased activity in covering a new tracking ship coming onboard that is in the O. & M. account this year for the first time.

We are trying to put in some WRM equipment overseas, our war reserve equipment overseas, and maintain that. That is going to add some dollars there. So, that area accommodates about two-thirds of that growth.

UTILITIES AND RENTS

Utilities and rents, up slightly in real terms just to accommodate a slight increase in automatic data processing equipment leases.

COMM is the first anomaly we have, and I am showing there $23 million involved in real growth. That is not quite true. What happens on the chart, or what happens in determining inflation is that our inflation column reflects the OSD O. & M. inflation rate. If we have any inflation that is attributable to any more than those rates, we have to put that in the program growth column. So, you get sort of an anomaly in the chart.

In this case we have had some sufficient, or some significant, COMM rate increases that occurred and that caused us to add about $12.5 million above the OSD allowable inflation rate. So, $12.5 million of that is really just rate increases rather than program costs.

DPEM has gone up significantly. A good explanation for that is increased activity in flying hours. Also, we are purchasing 15 wing kits in fiscal year 1983 and take delivery of eight modified C-5's in fiscal year 1983. We are going to change over and convert two E4-A's to E4-B's instead of one like we did in 1982.

We have about 14,000 new line items of exchangeable components. We take those spares out and put them in the aircraft and bring the components back to the depot to repair. They go back out to the forces again. That magnitude has gone up by about 14,000 items. That drives about $150 million of that increase there.

In all, we are trying to maintain that DPEM zero backlog that we hope to reach in 1982. If we can execute the program like we have it laid out, then hopefully we will be able to do that.

Purchased service is the largest growth item, and again a slight anomaly in the way we calculate the inflation in real terms; $350 million of the $700 million growth is involved in a policy change in how we handle contracting in the industrial fund.

I might add, that is $350 million TOA [total obligational authority] without outlays.

GAO ran a study and we used anticipated reimbursements, or anticipated orders, as a budget resource to fund contracts in the industrial funds.

They thought that we should not do that. The Senate Appropriations Committee looked at that last year, made reference to it in their report and in their conference item language, and we now are trying to make a policy change in that account. That drives the $350 million TOA requirement for us.

SPACE SHUTTLE ACTIVITIES

A hundred million of that growth is involved in space activities, and you will see as we proceed in the outyears increased space activity in the O. & M. account. As we pick up the Space Shuttle, we start to buy that out of O. & M., buying the operation of the Space Shuttle out of the O. & M. Those costs are going up significantly in O. & M. in the outyears, and I might add will be a problem for us.

Senator **Humphrey**. Beginning when?

General **Geran**. We really start in 1983. We transferred some money in 1980 and it was a migration from the R.D.T. & E., account into O. & M. In 1980 we had about $2 million involved in space launch activities; in 1983 that goes up to $156 million. So, there is substantial growth there. As we get in the outyears it grows even more dramatically.

Senator **Humphrey**. Excuse me, I missed that figure.

General **Geran**. It was $2 million in 1980; in 1983 we go to $156 million.

Senator **Humphrey**. But in terms of that program's impact on the total O. & M. budget, it is not that significant, is it?

General **Geran**. Not now, no, sir. I get a little fearful, again, in the outyears as we pick up the full thrust of the Space Shuttle operation and we start to add some new facilities to accommodate the space operation. That will cause quite a bit of increase just in that account, and we anticipate—now I am going to give you a constant dollar figure—it gets up over the billion dollar range in the outyears, in the 1986 and 1987 timeframe, in constant 1983 dollars. What it is in real terms I am not sure.

Senator **Humphrey**. It gets up into the billion dollar range?

General **Geran**. Yes, sir. That is significant.

Senator **Humphrey**. What was that $156 million figure?

General **Geran**. That is just for 1983.

Senator **Humphrey**. All right.

General **Geran**. So, in the outyears it gets up to a little over a billion.

Senator **Humphrey**. You say you are concerned about the outyears, what do you mean by that? Do you feel that the O. & M. account is not being raised sufficiently to incorporate that new responsibility?

General **Geran**. We think it is now, you have a problem with space activities because as in all accounts there is a tendency to try to hold down what the costs really are going to be when you submit a program. If we do not cost it accurately—and there are all sorts of difficulties in trying to cost it accurately—you could run into some trouble in the outyears because, as you start to execute the program we always have budget requirements increase.

If we have to accommodate increased requirements in the space activity along with the normal operations of our TAF forces and SAC forces, I am afraid that if we try to balance, picking and choosing between operating the Space Shuttle launch or fixing a runway, my tendency would be to do the Space Shuttle launch. That is my concern.

We are looking into that now, I might add, and we hope to try to at least partially solve that problem.

Senator **Humphrey**. What is the projected total O. & M. budget for 1986?

General **Geran**. I do not know, sir, I will have to try and provide something like that for the record. We go up in real terms about 3 percent a year, but I am not sure what that will end up being in 1986.

[The information follows:]

PROJECTED TOTAL O. & M. BUDGET FOR 1986

General **Geran**. The dollar amounts for outyears are for planning purposes only and are subject to periodic reviews before being submitted in the President's Budget.

Senator **Humphrey**. All right, go on.

General **Geran**. Aircraft POL accommodates the increases in flying hours. A bit of an anomaly here is that fuel prices have gone down. We have increased flying hours but fuel prices have gone down. In real terms the change shows not much growth again because of the change in mix of aircraft, flying more fighter aircraft and less of the larger aircraft.

Supplies and equipment, that contains the flying hour supplies area, and as we increase flying hours we have to increase the supplies to accommodate that, and that causes the increase.

Other expenses, the real growth accommodates unemployment compensation. For the first time it shows up in the budget in 1983 where the Department of Labor has transferred unemployment compensation responsibility over to the Federal agencies rather than the Department of Labor paying the whole account.

We pick up about $11 million here, and we are really guessing on the magnitude. We have not had very much experience with it. It is hard to get data from the States and we are not sure what that is going to run us.

Sir, that takes us through the Active Air Force. I would like to just show a couple of charts to home in on specific areas.

O. & M., AF flying hour program (thousands)

Fiscal year 1981	2,066
Fiscal year 1982	2,241
Fiscal year 1983	2,334
Percent change 1982-83	+4.1

Areas of major fiscal year 1983 change (+93):
- Training (+8);
- Strategic/Airlift (−17); and
- Tactical (+92).

In the flying hour program we increased about 93,000 hours generally in the tactical air forces. We are now on that drive to build up our monthly flying hours per crewmember to about a 20-hour benchmark if we can. We started that in 1981. In 1982 we average in a composite ratio—and that is not a very good measure but it is at least a measure—we average about 16.7 hours per TAF crewmember, I should say including TAC, and USAFE and PACAF. We now will get up to about 17.8 hours in 1983. We need to continue that activity.

Senator HUMPHREY. What about Air Force wide, per pilot, what is the trend?

General GERAN. The trend generally stays the same in the B-52 fleet and the 135 fleet. There may be a slight increase in the MAC airlift fleet. Again, we are flying a lot of MAC airplanes that are flown by the Reserves and Guard. So, that would show on our figures. Dean, do you have any other figures overall?

Colonel HESS. Yes, sir, that is basically true. The growth mostly per pilot is in the TAF, and there is some growth in the airlift fleet as the Reserve crew ratio builds, particularly in the C-5 as we start to get to the wing mod and it starts to come on line with a new wing that the Reserve Force built; and there is some growth in the C-5.

But basically, in the strategic forces it is a constant average per line pilot, average hours until we get to the place out in the 1984 timeframe.

PILOT FLYING HOURS

Senator **Humphrey**. I am trying to find some overall yardstick here. Do you have flying hours per pilot Air Force wide?

General **Geran**. I do not know whether we keep data that way, sir. I will have to research the record and try to find out. If we can, we will provide it for the record. We will write you an answer for the record on that. You know, we do it more by type of aircraft than anything else. I can give you type of aircraft.

[The information follows:]

Flying Hours Per Pilot

There is no overall yardstick available to make a valid comparison between training levels in different weapon systems using flying hours per pilot. Flying hours per pilot data for the major weapon systems is computed in order to evaluate relative training levels within a specific system. Due to differences in mission, tasking, aircraft capabilities, average sortie durations, etc., flying hour requirements vary greatly. Also, flying hour requirements for some systems are driven by factors other than crew training/readiness. For example, the RC-135, E-4, and E-3 flying hour requirements are driven by operational requirements as well as proficiency training for the crews. Therefore, a comparison of flying hours per pilot in different weapon systems, even if they are within the same mission area, is not very useful. Each weapon system must be evaluated against its own requirements.

The data below shows the programmed flying hours per pilot per month for the major weapon systems in FY 1983.

B-52	18.2
KC-135	16.7
FB-111	12.2
C-130	31.2
C-141	35.7
C-5	16.8
F-4	16.4
A-10	25.2
F-15	18.1
F-16	17.0
F-111	18.2

Senator **Humphrey**. All right, let us look at TAC, for instance. Run those figures by me again.

General **Geran**. Again it will vary by type of aircraft, in A-10's you will have more flying hours per crew member than you will in an F-15 or F-16, for example.

The composite that we have in TAC fleet would be about 16.7 hours in 1982. That average should go up if you fly the program to 17.8 hours in 1983.

Senator **Humphrey**. What do you mean, if you "fly the program?"

General **Geran**. Well, if we do not take any cuts.

Senator **Humphrey**. All right. What about projections for future years?

General **Geran**. That continues in 1984 and 1985 until we get the TAC fleet up to about 20 hours per crew member on a composite average.

Senator **Humphrey**. What is considered the minimum, what is the goal that you are shooting for?

General **Geran**. The 20-hour point is the goal we are shooting for, we want to maintain that if we can.

Senator **Humphrey**. Do you expect to reach that in 1986?

General **Geran**. In 1985.

Senator **Humphrey**. In 1985?

General **Geran**. Yes, sir.

Senator **Humphrey**. How low did it get in recent years?

General **Geran**. It is hard to give you a good figure, and I can again provide a figure for the record.

[The information follows:]

TAC Fleet Flying Hours Per Crew Member

The following table shows the actual flying hours per pilot per month for the major Tactical Air Force (TAF) weapon systems over the last 3 years.

	Fiscal year—		
	1979	1980	1981
F-4	13.9	13.8	14.1
A-10	18.6	18.7	20.0
F-15	14.3	13.7	15.9
F-16			12.7
F-111	15.0	16.2	17.7

We were down well below the 15-hour point back in the 1979 and 1980 timeframe.

I was over at USAFE at that time and we just could not fly the F-15 crew members enough to do what they needed to do in that European environment. The weather is lousy. We just did not get enough training.

So, it is very, very serious there. TAC suffered the same kind of syndrome back here at CONUS and we had problems in PACAF and also in Alaska.

Senator **Humphrey**. Which command has the lowest flying hours?

General **Geran**. I will have to provide that for the record, I am not sure.

I think they are probably fairly well balanced. USAFE might be a little lower, but that is a pure guess on my part.

[The information follows:]

Command With Least Flying Hours

The flying hour program is equitably balanced among the Tactical Air Force [TAF] to arrive at an equally trained pilot for any given weapon system in all theaters of operation.

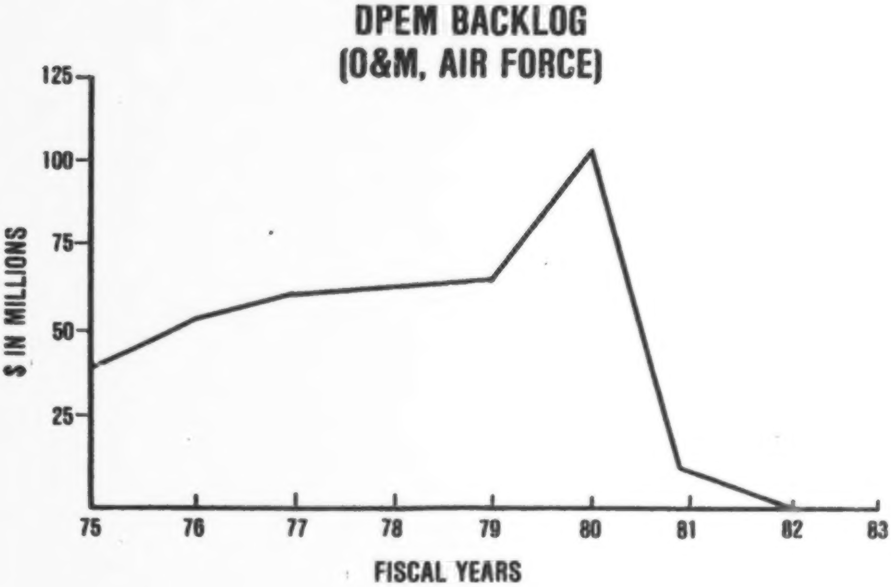
Senator **Humphrey**. Thank you.

General **Geran**. We have a decrease in the strategic area that goes along with the association of the retirement of the three B-52 squadrons. So, we have strategic flying hours going down in toto as you look at them.

We have training hours increasing. We are funding now what we call an ENJJPT program, which is a EURO-NATO joint jet pilot training program for the first time, where we bring in some European NATO allied crew members and they go through their initial pilot training here.

That started in 1982. We continue that program in 1983. That builds in flying hours and partially offsets that decrease in the

B-52 line. So, you see that balancing out. We end up with about 92,000 or 93,000 added flying hours.



DPEM BACKLOG
(O&M, AIR FORCE)

Depot purchased equipment maintenance backlog, we touched on that in the previous chart. This just reflects that we have brought the backlog down and I might say, we got it down to zero for the first time since about 1975.

We are very proud of that and we continue to keep that DPEM backlog down to zero. Our funding associated with DPEM goes up accordingly, and we go from about $2.4 billion in 1982 to about $2.8 billion or so in 1983 to keep that backlog to zero.

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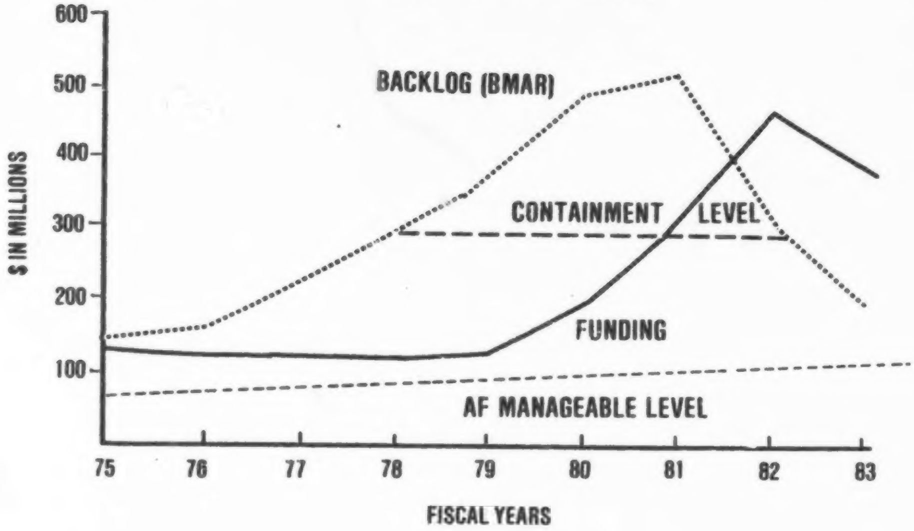
FACILITY MAINTENANCE AND REPAIR
FUNDING AND BACKLOG
(O&M, AIR FORCE)



Facilities maintenance is sort of a busy chart. Let me see if I can walk you through it. The solid black line is the associated funding line; the dotted line is the backlog, it shows the backlog rising and then dropping. The containment level is put in there, and that is a congressional containment level of $300 million that was levied as a goal for the Services to reach back in the 1977–1978 timeframe.

That backlog for the Air Force continued to rise through 1979 and 1980, and in 1981 for the first time we started to turn the corner on that when we had sufficient funding to do some facilities projects. We continue that now. We will be down—if we get the supplemental in 1982 because $75 million of the 1982 supplemental is tied up in facility projects—we will be down to about a $307 million backlog.

In 1983, if we can again continue the planned program we will be down to about $188 million.

The Air Force goal in that area is right at about $100 million. You keep about $100 million worth of projects on the shelf, designed, ready to go. That is a good average to work the Air Force problems, that is what we are trying to obtain. Hopefully, we can reach that in the outyears.

Those are all the charts I have, sir. We are now prepared to answer any questions you have.

AIRCRAFT SPARE PARTS

Senator **Humphrey**. Let us talk about the problems on spare parts and otherwise that keep aircraft on the ground. How is that situation progressing?

General **Geran**. We have put increased funding in the spares category starting in 1981, I believe. That increased funding for the first time will start to really show up in 1983. We have obviously

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gotten some parts in 1982, but the real bulk of that will come in in 1983. We are trying to match the flying hour program with the spares, if you will. They sort of have to go hand in hand.

Senator HUMPHREY. Yes.

General GERAN. We cannot increase flying hours without having associated spares. So, it is coming along reasonably well. I will let Mac add to this—we have spares in different categories; we have what we call peacetime operating spares. We have then WRSK and BLSS which are war reserve spares kits and base level self-sufficiency.

Both of those are fully funded in 1983. Then we go into WRM, and that is not fully funded. That is about the extent of my knowledge. So, I will turn it over to Mr. McElhanon and let him add to that.

Mr. MCELHANON. Well, we had the supplemental in the 1981 timeframe that was intended to get us on the road to getting well, and then the amendment in 1982 that would get us well.

Now, we had some losses in the 1981 timeframe, we did not get all of that money. Then we got an $80 million cut in fiscal year 1982 that was an undistributed cut. So, that kept us from achieving totally the peacetime stocks in the 1982 buy program.

We do get fully funded in fiscal year 1983, but in 1982 we are about $200 million short in peacetime. But that should be put in the correct context. We do have $2.46 billion funded in 1982 against the peacetime operating stock.

Now, in the WRSK-BLSS we have a requirement of $882 million, we have $879 million funded in 1982. So, that is essentially a fine point in getting well there.

Senator HUMPHREY. Let me interrupt you at that point. You are nearly fully funded in 1983 in the WRSK-BLSS, is that what you are saying?

Mr. MCELHANON. Yes, sir.

Senator HUMPHREY. What do you mean by fully funding it, is it going to be completely well at that point?

Mr. MCELHANON. Well, we are only $3 million short of the requirement, that is up in the $880 million range.

Senator HUMPHREY. What is the requirement?

Mr. MCELHANON. You mean in the dollar amount?

Senator HUMPHREY. No, I mean, by virtually fully funding it, are you proposing to bring these stocks up fully, or just to make whatever progress you think you can make in this year?

Mr. MCELHANON. We have computed the requirement for all of our war tasked units. In the 1984 timeframe it will relate to the 1982 funding. There is essentially a 2-year leadtime on getting delivery.

So, we have computed that requirement and it comes out to a specific dollar figure to fully fund our prepositioned kits.

Senator HUMPHREY. A full 30 days for all items.

Mr. MCELHANON. Yes, sir.

Senator HUMPHREY. And we will achieve that point by what year?

Mr. MCELHANON. We reached it totally in the fiscal year 1983 timeframe. We just have a slight deficiency in the 1982 timeframe.

Senator HUMPHREY. But what about the delay of the pipeline; is that significant?

Mr. MCELHANON. I am not sure I understand.

Senator HUMPHREY. If you fund them in 1983, how quickly do you get the materials?

Mr. MCELHANON. We do have essentially a 2-year leadtime. Now, that is one of the main reasons that we got so seriously behind on the spares, part of it was underfunding. But we ran into an exceedingly long leadtime. That means then you have to have your TOA earlier and get them on contract earlier when there are longer leadtimes.

So, we have been trying to get over that hump, and we are making some significant progress. You cannot solve this problem all in 1 year, it is simply too big to solve in 1 year. You have production limitations against your doing it in 1 year.

Senator HUMPHREY. I understand.

Mr. MCELHANON. I feel very comfortable that with the some $500 million we added in the 1981 supplemental to work for us just this last summer, late in the year; and then the significant amount of program that we have in 1982, continuing in 1983. We will be OK on peacetime stocks which are so important as a foundation for readiness to go to war, and with the prepositioned WRSK-BLSS kits, that leaves us now only the sustaining WRM.

That is a bigger rock and we are not getting over that yet, and the 1983 program does not fund that fully.

Senator HUMPHREY. Do we have any statistics on that WRM?

Mr. MCELHANON. I have some dollar figures. I am not sure I can give you in an open session the total recitation on what it does. We have given priority in the 1981 and 1982 funding for our strategic airlift to get them up to the specified days, and that is a classified number.

That is outlined in the defense guidance. For the tactical forces we have yet to begin, our first funding on that will be in fiscal year 1984 to carry them beyond 30 days of WRSK-BLSS prepositioned kits.

Senator HUMPHREY. All right, let us reserve that for a brief closed session at the completion of the hearing.

DEPOT MAINTENANCE

Is depot maintenance fully inclusive, or is it just aircraft parts, and so forth?

General GERAN. Yes, sir.

Senator HUMPHREY. It is all kinds of stuff.

General GERAN. Yes, sir; missiles, engines, everything.

Senator HUMPHREY. Ground equipment?

General GERAN. Yes, sir.

Senator HUMPHREY. Let me ask you, what initiative has the Air Force engaged in to reduce cost of programs in the O. & M. accounts?

General GERAN. We have, along with the rest of the Department, we are striving to make some economies and efficiencies, if you will. In total, the Air Force has laid out a program of about $5.7 billion in the economies and efficiencies area.

O. & M.'s share of that is about $1.3 billion, and that is through a variety of initiatives and programs, and using ways to try to either save money or avoid some costs.

There is some data, I think, that Senator Levin wanted and we are in the process of preparing that now and sending over the details of that to him.

Senator **Humphrey**. Well, can you give us some specifics?

General **Geran**. Well, one specific, for example, that comes off the top of my head is in the depot purchased equipment and maintenance area, there is about a $56 million cost avoidance in 1983. Mac, what is that for?

Mr. **McElhanon**. That is a productivity gain, largely because of adding some 3,000 civilians to our depot maintenance work force in the 1982 amendment.

That allows us to put direct workers into the work force and not increase the overhead. So, you spread the overhead against the larger production work force. That gave us a gain, then, in cost per manhour of nearly a dollar less and reduced our costs.

I might also say that in the depot maintenance shops we have a very active program. We do not even have a good reporting system on it yet because the economy and efficiency issue is sort of just getting born now.

But there are many things that are happening there in terms of learning to repair something that you formerly chucked away. We are learning more about the repair of F-100 engine components. We are saving these high-cost items through a developed repair technique.

We take note of the high cost of items and if you have good pieces off several you weld them back together. We have welding techniques that are sufficiently precise that you can do this. We save a great deal of money through repairing things that were not intended to be repaired at the time they were bought.

Senator **Humphrey**. I note the Air Force has reduced the chemical warfare defense program by $8 million. Why is that in 1983?

General **Geran**. I will have to provide the details for the record, sir, on that.

[The information follows:]

Reduction of Chemical Warfare Defense Program

It was necessary to slip $8M because research and development of second generation fabrics for protective suits revealed no appreciable improvement over first generation items. This $8M was moved to fiscal year 1985 for procurement of new suits which significantly reduced thermal burden on the wearers.

General **Geran**. My understanding of the program is that we are in sort of a mid point, if you will. We have purchased essentially the equipment that we now have developed. We are in the process now of trying to develop some new equipment. As that gets developed, then our purchase cost will go up and we will buy that new equipment depending on the cost, out of O. & M.

So, I think we are in a lull until we get some new equipment. As you know, that is a serious problem for us. We can entertain that some more in closed session, too.

Senator **Humphrey**. Well, do all of your people now have, or a satisfactory number now have, a complete set of protective clothing, or is that in the pipeline? Where do we stand? If we are going to have a lull, there must be a reason for it, I hope.

General GERAN. Yes, sir. I am sure there is. I will have to provide it for the record, sir. I honestly do not know. I prefer to answer you that way.

[The information follows:]

PROTECTIVE CLOTHING

All Air Force personnel located in or deployable to high threat areas now have at least one complete set of protective clothing. The goal is to provide three sets of protective clothing to personnel because the suit cannot be decontaminated or laundered after an attack without destroying its activated charcoal. We have met 91 percent of the requirement for suits but only 68 percent for overboots. We will continue to fill shortages until improved protective clothing presently under development is available, which is anticipated in fiscal year 1985. Improved clothing capable of being decontaminated is needed to relieve thermal burden and lack of dexterity imposed by present clothing.

Senator HUMPHREY. All right, we will ask those who do not have a clearance to leave the room at this juncture and we will go into executive session.

EXECUTIVE SESSION

All right, will you give us a rundown on the status of the other war reserve materiel?

STATEMENT OF CHARLES D. McELHANON, CHIEF, MODIFICATION AND OPERATION AND MAINTENANCE PROGRAMS DIVISION, DIRECTORATE OF LOGISTIC PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF, LOGISTICS AND ENGINEERING DEPARTMENT OF THE AIR FORCE

Mr. McELHANON. Yes, sir.

Let me first state, I am not the best witness you could have on spares, most of which are in procurement appropriati[illegible]

But I do have some data and I will supplement it [illegible] record if need be. We have defense guidance which says th[illegible] should have the strategic airlift funded and supported to a [[illegible]ted] day level. The TAC fighters and the strategic forces which [illegible] involved in conventional roles, the objective is [deleted] days sustainability.

Now, we are fully funded on our [deleted] days by 1983 on the C-5. The C-141 will be funded to [deleted] days in fiscal year 1984. We have not begun funding of the tactical forces as yet, that picks up and begins in the fiscal year 1984 timeframe and then it continues in the 1985–86 time.

The size of the numbers we are talking about, I might say that in the fiscal year 1983 budget our requirement is about $1.1 billion. We have $102 million, the bulk of which is in strategic airlift and certain common items that will be shared in by the strategic airlift, like radios, et cetera. So, that leaves us something in the order of a billion dollars short.

Senator HUMPHREY. The total shortage is a billion?

Mr. McELHANON. Our total shortage would be right at $1 billion.

Senator HUMPHREY. And you are proposing how much?

Mr. McELHANON. We have in our budget $102 million.

Senator **Humphrey**. Is there a program or an objective to bring those levels up to something more reasonable by some certain date, or how are you proceeding?

Mr. **McElhanon**. Yes, sir. I believe the defense guidance says we will do this by the end of the funded delivery period. That means that we will have funds in the TAC forces in the 1984-85 timeframe, and I believe also the 1986.

Senator **Humphrey**. By the end of the 5-year plan which will be 1987?

Mr. **McElhanon**. The items should have been bought and delivered by the end of the 1987 timeframe, which is the end of the 5-year period.

Senator **Humphrey**. I have a number of questions I would like to submit in writing and will ask you to respond.

General **Geran**. Yes, sir.

Senator **Humphrey**. The record will remain open for 15 days for that purpose.

[Questions, with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. DANIEL B. GERAN

SUPPORT OF INCREASED END STRENGTH

Senator **Humphrey**. The Air Force is requesting an increase of 20,000 military personnel in fiscal year 1983. What is the O. & M. cost to support this increase.

General **Geran**. The increase of nearly 20,000 active military personnel requires approximately $26 million dollars per year in O. & M. We use a factor of around $1,300 per person to compute all the associated O. & M. costs required to support assigned personnel.

SUPPORT OF NEW SYSTEMS

Senator **Humphrey**. Please identify the fiscal year 1983 O&M costs associated with each new system being introduced into the USAF inventory (e.g., ALCM, GLCM, KC-10, etc.)

General **Geran**. GLCM. The Ground Launched Cruise Missile (GLCM) achieves its initial operating capability (IOC) in December 1983 (fiscal year 1984) at a classified overseas location. Fiscal year 1983 budget of $6.0 million includes funds for: training activities at the 868th Tactical Missile Training Squadron at Davis-Monthan AFB, Arizona ($0.4M) and funds for travel, contractual services, equipment rental and supplies to support the beddown of GLCM in Europe ($5.6M).

TR-1. The first TR-1 aircraft was delivered in September 1981 for use in training TR-1 aircrews. In fiscal year 1983, with the beddown of the TR-1 in Europe, it will begin its operational mission. The fiscal year 1983 budget of $12.3 million includes funds for the 2,166 flying hours required for operational missions ($3.5M), the intermediate and depot level contract maintenance of the TR-1 airframe and equipment ($6.7M), and the travel, transportation and civilian pay required to support the TR-1 squadron at its new location ($2.1M).

EF-111. The EF-111 Electronic Warfare (EW) aircraft becomes operational in fiscal year 1982 and is building to its fiscal year 1983 position of 14 aircraft and 3,034 flying hours. Funds budgeted in fiscal year 1983 ($10.2M) to operate and maintain the EF-111 are for: flying hour related fuels/supplies ($7.3M), contractor logistic support and purchased maintenance for unique or peculiar EW equipment ($2.4M), and civilian pay, travel/transportation, and equipment in support of the EF-111 squadron ($0.5M).

Compass Call. The Compass Call Command Control Communications Counter measures (C3CM) aircraft were introduced to the force in fiscal year 1982. The continuing build of this system to its fiscal year 1983 levels of 10 aircraft and 4,860 flying hours results in operating requirements ($10.1M) for: flying hour related costs ($7.1M), purchased equipment maintenance of the EC-130H mission simulator ($.2M) and the civilian pay, travel/transportation, and equipment required to support squadron operations ($2.8M).

KC-10. The KC-10 Advanced Tanker Cargo Aircraft logistics and maintenance concept provides for a mix of organic "blue suit" and civilian contractor support. Organizational (flightline) and limited intermediate maintenance will be performed by Air Force personnel. Intermediate and depot maintenance and logistics support will use existing contractor facilities, personnel and material resources, Aircrew training is also contractor provided because commercially purchased aircrew training has been deemed the most economical approach. The KC-10 became operational in fiscal year 1981 and is continuing to build to its fiscal year 1983 level of 15 aircraft and 5,697 flying hours for the active forces. Funds budgeted for the fiscal year 1983 ($37.0M) to operate and maintain the KC-10 are for: flying hour fuel and supplies ($18.6M), Contractor Logistics Support and Contract Training ($16.3M), and civilian pay, travel/transportation and equipment in support of the KC-10 squadron ($2.1M).

ALCM. The Boeing AGM-86B Air Launched Cruise Missile is a small, long range, accurate, nuclear armed missile planned for use with the B-52 bomber force and the B-1B aircraft. The program is concurrently in full production and developmental test and evaluation/follow-on test and evaluation (DT&E/FOT&E). The fiscal year 1983 Operation and Maintenance (O. & M.) funding ($6.5 million) is to support civilian personnel costs, travel, supplies, equipment and contract services in support of the FOT&E effort.

M-X. Air Force has budgeted $5.4 million in fiscal year 1983 (O. & M.) for operation of the Air Force Regional Civil Engineer Office at Norton AFB, in support of the M-X program. The funds are for salaries, travel, supplies, equipment, lease of data processing equipment, etc., for 146 personnel assigned to the office. Civil engineering efforts in planning, programing, and pricing of current and future construction of M-X facilities are required to achieve the anticipated initial operating capability of the M-X.

"SEEKING RELIEF" FROM LARGER PROGRAMS

Senator HUMPHREY. The Air Force supports a moderate contracting-out program "but seeks relief" from larger programs. What is meant by "seeking relief"? More personnel for assessing contracts? Less contracting-out? Legislative proposals?

General GERAN. The Air Force has been the leader in the Department of Defense in complying with OMB Circular A-76. We have contracted most of our base operating support that is not needed for our wartime mission. We are now faced with guidance from OSD to continue a high level of contracting over the next six years—fiscal year 1983 through fiscal year 1988. Over 23,000 civilian authorizations will be studied for possible conversion to contract. We have reached the point where we will be forced to consider areas which could have an impact on our wartime capability. Other areas suggested for contracting, such as the commissary and morale and welfare activities, have been consistently identified by our personnel as major factors in their decision to remain in the Air Force. We could expect to see morale and retention suffer as a result.

We do not disagree with the goals of the OMB Circular A-76, but we do object to directed arbitrary goals for contracting out. We would prefer to operate at our own pace using our own rigorous process to identify contract candidates. This is the relief which we seek.

PACKAGING CONTRACTS FOR BASE OPERATIONS

Senator HUMPHREY. One method being investigated by the Navy involves packaging contracts for base operations and signing only one large contract. Could the AF apply this concept to simplify its program?

General GERAN. The contracting of "complete activities" is certainly possible, as Vance AFB has shown. However, certain factors must be taken into consideration when addressing the possibility of contracting out a total base operating support function.

Workload accomplished within base-operating-support activities at CONUS USAF bases is accomplished by military personnel tasked to deploy during wartime. The contracting out of these activities would replace deployable military manpower with a nondeployable contract work force. Such conversions would reduce the military manpower needed to fulfill our wartime tasking and aggravate the wartime shortage of military personnel in selected specialities.

During peacetime we must maintain a minimum ratio of CONUS to overseas personnel by skill to avoid requiring our people to spend inordinate periods of time outside the U.S. Our experience in this area shows exceptional retention difficulties when people spend too great a share of their careers overseas.

The use of large contracts to provide total base operating support would preclude many of the small business or "set-aside" firms from winning contracts which they are currently able to successfully compete for and operate on USAF bases. While they may eventually operate these functions under a subcontract arrangement, the Air Force would not be able to actively support or receive credit for employing these firms.

While the Air Force has not taken the approach of relying on a single base-operating-support contract, many of our facilities rely heavily on contractor support. Facilities such as Arnold Engineering Development Center (AEDC) rely almost exclusively on contractors for their base operating support. In addition, facilities such as the ranges at Patrick and Eglin AFB are operated by contractors.

The Air Force has long been a leader in contracting out and leads the Services in percentage of the civilian work force contracted out. The other Services may be better able to contract large activities at this time since they are not at the level of contracting which affects their wartime tasking—a level which we are approaching within the Air Force.

CONTRACTING OUT

Senator **Humphrey**. Is contracting-out costing or saving us money?

General **Geran**. The A-76 Cost Comparison Program, by design, will only result in contract of those activities where there is a significant cost advantage favoring the contract mode—savings must equal at least 10 percent of the personnel-associated costs. Our fiscal years 1980 and 1981 cost comparison programs have thus far resulted in 137 contract conversion actions at a cost advantage to the government of over $186 million. The strong pressure exerted at command level to ensure the most efficicent and cost effective in-house estimates has resulted in a cost advantage of over $27 million for those 54 functions which remained in-house.

O. & M. AF SUPPORT FOR SPACE SHUTTLE

Senator **Humphrey**. What is the total O. & M. AF support for the space shuttle?

General **Geran**. The total O. & M. AF support for the space shuttle in fiscal year 1983 is $176.8 million—an increase of $104.3 million over the fiscal year 1982 current estimate. The fiscal year 1983 budgeted program for the space shuttle support has a $27.2 million O. & M. shortfall. This shortfall results from provisional Air Force and NASA pricing policy agreements which call for increased reimbursements for DOD shuttle launches and standard range support services for shuttle launches at both Kennedy Space Center and Vanderberg AFB.

GROWTH OF SHUTTLE SUPPORT COSTS

Senator **Humphrey**. Where and to what levels, will shuttle support costs grow within FYDP?

General **Geran**. A significant increase in O. & M. funding is forecast for the Space Launch Support program in the next few years as we continue the build-up of the Vandenberg AFB launch and landing site and as additional Air Force satellites are launched on the Space Shuttle. We currently estimated the Shuttle O. & M. requirement will be on the order of $700 to $800 million a year by 1987. This estimate is subject to change because our plans for operating the Shuttle in the outyears are still evolving and are highly dependent on the maturing of the Shuttle system at Kennedy.

IMPACT OF A.T. & T. DECISION

Senator **Humphrey**. What is the likely impact of the A.T. & T. decision on AF operating costs?

General **Geran**. The FCC decision to allow the A.T. & T. 16.4 and 16.0 percent tariff rate increases in May and June of 1981 had a $26 million impact on Air Force annual common user and Federal Telephone System (FTS) communications costs. These increased costs were unbudgeted in fiscal year 1982, and are only partially budgeted in fiscal year 1983. Of the total impact of $26 million, $15.6 million is included in the fiscal year 1983 budget request, and $10.4 million is unbudgeted. Also, the impending divestiture of A.T. & T. may have potential budget impact in fiscal year 1984. It is too early to quantify that impact now, but in general we expect an increase in the cost of leased commercial circuits and equipment. We feel that because of the recent regulatory actions there will be increases in local service costs, and in capital outlays to buy previously leased customer equipment. Also, there is a potential cost increase to assume network management functions previously performed by A.T. & T.

A.T. & T. IMPACT ADDRESSED IN BUDGET

Senator **Humphrey**. How is this impact addressed in the budget?

General **Geran**. Of the $26 million impact of the 1981 A.T. & T. tariff rate increases, $15.6 million is included in the common user and FTS communications portion of the Major Force Program III budget. The remaining $10.4 million is unbudgeted.

RAPID DEPLOYMENT JOINT TASK FORCE HEADQUARTERS

Senator **Humphrey**. RDJTF headquarters requirements increase from $4.6M in fiscal year 1982 to $6.6M in fiscal year 1983. Does this represent the full cost of operating a Unified Command headquarters? How does this cost compare to the operating requirements for EUCOM or PACOM?

General **Geran**. The actual change is from an initial fiscal year 1982 O&M estimate of $4.9 million to a revised fiscal year 1982 current estimate of $6.7 million, and then to a $13.3 million requirement in fiscal year 1983. Certain adjustments have to be made to approximate the "normal" full cost of operation of the RDJTF unified command headquarters.

First of all, both the fiscal year 1982 and fiscal year 1983 budget estimates contain funding for a classified project which has no relationship to actual day-to-day unified command headquarters operations ($2.0 and $7.0 million, respectively).

Secondly, the RDJTF headquarters is a tenant at MacDill AFB and as such is the beneficiary of support being provided by U.S. Readiness Command, MacDill AFB, and Air Force Communications Command such as, data automation services, real property maintenance and leased communications support. The value of this support for fiscal year 1983 is estimated at $2.1 million. Thus the estimated full cost for an RDJTF unified command headquarters staffed with 569 personnel is as follows:

[In millions of dollars]

	Fiscal year—	
	1982	1983
Fiscal year 1983 budget request	$6.7	$13.3
Less: Classified project	−2.0	−7.0
Add: Other support cost	+2.0	+2.1
Total	6.7	8.4

Subsequent to the submission of the fiscal year 1983 President's budget, the RDJTF Headquarters received an increase in personnel authorization from 569 to 967 personnel. Incremental cost associated with this increase has not yet been determined. Also headquarters operating cost may rise significantly if a forward operating element staffed on a rotational, temporary duty basis is established. Fiscal year 1983 operating cost of the European Command (EUCOM) and Pacific Command (PACOM) unified command headquarters is as follows:

[Dollars in millions]

Unified command	Fiscal year 1983	Number of personnel
EUCOM	$14.839	853
PACOM	12.573	759

JCS EXERCISES ACCOUNTING

Senator **Humphrey**. Explain the changes taking place in accounting procedures for tracking JCS exercises. How is this reflected in the O. & M. AF budget?

General **GERAN**. The fiscal year 1982 Defense Appropriations Bill transferred the transportation related funds associated with the JCS Exercise Program from the individual military service appropriations to the JCS (Defense Agency) appropriation. The transfer was made to the JCS so the funds could be managed, supported and defended by the Joint Chiefs of Staff.

In fiscal year 1983, JCS Exercise Program transportation funding is budgeted for in the JCS (Defense Agency) appropriation. The Air Force's fiscal year 1983 O. & M. budget funds only those costs required for participation by Air Force units in JCS Exercises, e.g. Per Diem, expendable supplies and equipment.

WAR READINESS MATERIEL (WRM)

Senator **HUMPHREY**. Please identify the gross changes in WRM funding, i.e., increases for prepositioning, decreases for supply acquisition. How would you characterize the net effect of these changes as they relate to AF sustainability?

General **GERAN**. The gross changes in WRM funding between fiscal year 1982 and 1983 represent a decrease of $11.5 million for supply acquisition and an increase of $9.8 million for prepositioning. The decrease accrued due to the procurement of supplies to support prepositioning in fiscal year 1982 and an Air Force policy change that completes the transfer of WRM supply acquisition to the stock fund in fiscal year 1983. The $9.8 million increase accrued in areas of travel, transportation, commercial maintenance and non-investment equipment to support prepositioning in Southwest Asia and one-time increases in housekeeping set requirements at collocated operating bases in Europe. In effect, these changes do not characterize a lessening in the Air Force's resolve to support sustainability. The combined Air Force O. & M. and stock fund program reflects a balanced approach in acquiring and maintaining a WRM prepositioning program in Europe and Southwest Asia.

AF REDUCTION OF CHEMICAL WARFARE DEFENSE PROGRAM

Senator **HUMPHREY**. Why did the AF reduce this program by $8M in fiscal year 1983?

General **GERAN**. It was necessary to slip $8M because research and development of second generation fabrics for protection suits revealed no appreciable improvement over first generation items. This $8M was moved to fiscal year 1985 for procurement of new suits which significantly reduce thermal burden on the wearers.

CURRENT COST OF CHEMICAL WARFARE DEFENSE PROGRAM

Senator **HUMPHREY**. What is the current cost of this program, and what are AF plans in this area?

General **GERAN**. The current fiscal year 1983 program is as follows:

	Millions
Operation and Maintenance	$2.6
Other Procurement	12.8
Military Personnel	3.1
Research & Development	16.3

The Air Force plans call for the procurement of second generation aircrew protective equipment and shelter modification kits in fiscal year 1984, and initial procurement of second generation ground support protective equipment and decontamination systems in fiscal year 1985. Procurement will continue through fiscal year 1989 to provide improved individual protective gear, collective protection facilities, detection devices, and decontamination systems for personnel located in or tasked for deployment into high threat areas.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY GENERAL DANIEL B. GERAN

O. & M. PROCUREMENT FUNDS

Senator **LEVIN**. General Geran, you say in your statement that "every O. & M. dollar the Air Force spends contributes to readiness." In my opinion, however, there is a real danger that the emphasis on procurement of big-ticket items in this 5-year program is going to cause O. & M. and readiness to suffer.

In the DOD budget as a whole, there has been significant shift in the percentage of the total budget going to O. & M. and the percentage of the total going to procurement in the last couple of years. Next year, in fiscal year 1984, the current 5-year program projects only 1.7 percent real growth in O. & M. spending.

General Gabriel, Commander of US Air Force, Europe, said in his statement submitted to the Preparedness Subcommittee that in the years beyond fiscal year 1983, the current 5-year defense plan does not adequately fund his mission requirements.

How do the Air Force O. & M. accounts from fiscal year 1983 to fiscal year 1987 in the current 5-year defense plan compare to the procurement accounts in terms of constant dollars and real growth?

Please provide for the record a table showing the Air Force O. & M. and procurement accounts for fiscal year 1980 to fiscal year 1987 in current and constant dollars.

General **Geran**. The following table shows the Air Force O. & M. and procurement accounts for fiscal year 1980 to fiscal year 1983 in current and constant dollars:

BASE YEAR 1983 RATES

[Dollars in millions]

	Fiscal year—			
	1980	1981	1982	1983
Procurement accounts:				
Current (dollars)	12,796	16,779	24,003	30,430
Constant (dollars)	16,085	19,410	25,689	30,430
Real growth (percent)	7.9	20.7	32.3	18.5
O. & M., Air Force:				
Current (dollars)	12,421	14,742	16,124	17,945
Constant (dollars)	15,402	16,337	16,983	17,945
Real growth (percent)	7.1	6.1	4.0	[1] 5.7

[1] The real growth is about 4.8 percent if the $350 million one-time industrial fund increase is excluded.

EXCESS O. & M. FUNDS

Senator **Levin**. General Geran, at the end of fiscal year 1981, the last complete fiscal year, over $332 million in unobligated balances in the O. & M. accounts DoD-wide lapsed. The Air Force had over $85 million lapsing in its O. & M. accounts. The figures represent budget authority appropriated by the Congress which the Air Force and the other Services consequently reverted to the Treasury. In the case of both the Air Force and the other services, the amounts lapsing in fiscal year 1981 are significantly higher than in previous fiscal years. Why was the Air Force unable to use all of the money appropriated in fiscal year 1981? Does this mean that the O. & M. accounts are growing faster than the Services can realistically obligate?

General **Geran**. The $85 million lapsing in the Air Force O. & M. Appropriations are attributed to the following accounts:

Operations and maintenance:	*Millions*
AF Active	$70.1
AF Guard	12.3
AF Reserve	2.9
Total	85.3

The $70.1M in O. & M. AF Active is comprised of three components:

	Millions
Foreign currency	$39.9
HAC directed lapse	20.2
Other	10.0
Total	70.1

The 39.9M lapse in foreign currency occurred due to a net gain in the Air Force foreign currency account. Fiscal year 1981 was the first time since foreign currency procedures were established in the fiscal year 1979 DoD Apropriations Act that the Air Force has experienced a net gain, rather than a net loss. OSD requires that all foreign currency gains and losses in a Service's O. & M. account be placed in a certrally managed allotment (CMA), where they cannot be diverted to other programs. OSD transfers funds to and from Service's O. & M. foreign currency CMA's, and is

expected to withdraw these funds during fiscal year 1982 for other currency uses. Therefore, the Air Force had no authority to obligate these funds in fiscal year 1981. Secondly, after additional funds were approriated to the AF in the fiscal year 1981 supplemental appropriation act, the House Approriations Committee required additional information on certain programs, valued at $20.2M. After consideration of this information, the HAC disapproved those programs and directed that the funds lapse in a letter to DoD dated 4 August 1981. The remaining $10M, which is 6/100 of one percent of available fund, was distributed through hundreds of funding points throughout the Air Force and is intentionally reserved for contingent liabilities and other unforeseen price increases.

The Air National Guard O. & M. account lapsed $12.3 million which was primarily due to the unusual transfer of aircraft from the Active to the Guard. The $12.3M in Air National Guard O. & M. is comprised of three components:

	Millions
Underfly	$7.3
HAC directed lapse	2.4
Other	2.6
Total	12,3

The $7.3M underfly of the fiscal year 1981 flying hour program was caused by late receipt of aircraft from the Active force and higher than anticipated maintenance requirements on some of these transferred aircraft. Secondly, after additional funds were appropriated to the Air National Guard in the fiscal year 1981 supplemental appropriation act, the House Appropriations Committee required additional information on certain programs valued at $2.4M. After consideration of this information, the HAC disapproved these programs and directed that the funds lapse in a letter dated 4 August 1981. The remaining $2.6M which is 2/100 of one percent of available funds was spread throughout the various sub accounts in the Air National Guard and was reserved for contingent liabilities and other unforeseen requirements.

The Air Force Reserve O. & M. lapsing balance consisted of $2.2 million due to HAC direction and $.7 million for management reserves.

The preceding data show that much of the fiscal year 1981 O. & M. lapsing balance was due to items beyond the control of the Air Force: namely, the foreign currency gain, the HAC directed lapse and ANG underfly. Otherwise, the fiscal year 1981 lapsing amounts, when considered as a percentage or available funds, are the lowest in recent history. The Air Force has taken aggressive management action to keep lapsing O. & M. balances to a minimum, while at the same time ensuring prudent management reserves for contingent liabilities. The seemingly high amounts in fiscal year 1981 should not be construed to imply that the O. & M. accounts are growing faster than the Air Force can obligate, especially when the percentages of lapsing balances compared to total availability indicate the opposite trend.

While the real growth in the procurement areas have exceeded the O. & M., AF growth due to large early investments required for the B-1B and M-X programs, the fiscal year 1983 real growth of 5.7 percent in O. & M., AF provides for a 93,000 flying hour increase (mainly for tactical forces) as well as hold depot maintenance backlogs to zero. It also provides for reductions in the backlog of real property facility maintenance.

The perception that there may be a linear relationship between O. & M. and procurement is not the case. If forces remain relatively stable, that is if manpower, aircraft, flying hours and those things that drive the O. & M. account remain constant, the only thing that has to be accommodated for is inflation. If the true cost of inflation is isolated, then the O. & M. budget ought to remain relatively constant as you proceed in the outyears. Increases in RDT&E and procurement have little near year impact on O. & M. as support requirements for new weapon systems are 2 to 5 years downstream when they enter the active inventory. A balanced O. & M. request is based on requirements to support existing forces and programmed increases within total fiscal constraints for the budget year. Thus, O. & M. must be looked at as a costing of current force requirements and not as a percentage of future procurement.

The dollar amount for outyears are for planning purposes only and are subject to periodic reviews before being submitted in the President's Budget.

Senator LEVIN. Going back to fiscal year 1978, the Air Force has been unable to efficiently use all the O. & M. funds appropriated in every year except one, and these funds lapsed as follows: fiscal year 1978—$17 million; fiscal year 1979—$17 million; and the fiscal year 1981 figure of $85 million. The total is $119 million. I know this does not seem much in a multi-billion dollar O. & M. budget, but it is a lot to my constitutents, and whenever cuts of such relatively small amounts are proposed by Members of Congress, the Services certainly create a great hue and cry. Why should this Committee, based on this past experience, reduce your O. & M. accounts by $50 million in fiscal year 1983 in anticipation of similar unused funds?

General **Geran**. Before I answer the question I would like to clarify several points implicit in it. First, the Air Force strongly disagrees that lapsing O & M balances necessarily represent an inefficient use of funds. A responsible financial manager should not spend all his funds and then suffer an overobligation due to unforeseen circumstances. The lapsing balances in fiscal year 1978 through fiscal year 1981 resulted primarily from reserves at many hundreds of funding points in the Air Force on many thousands of financial transactions (e.g. contracts, purchase orders, MIPRs, etc). Second, it should be noted that there was also a lapsing balance in the fiscal year 1980 O. & M. accounts which was not portrayed in the budget since it was applied to the R.S. 3732 deficit which existed at that time. Thus, minor levels of unobligated balances may be expected. Lastly, fiscal year 1981 was unusual due to two items: a net gain on foreign currency, which required reserving appropriated funds equal to the value of the gain, and a House Appropriations Committee direction to lapse funds.

The following data shows the trend in the Air Force O. & M. lapsing balances:

PERCENTAGE OF LAPSING BALANCES COMPARED TO TOTAL AVAILABILITY IN AIR FORCE O. & M. FISCAL YEARS 1978–81.

Fiscal year	Percent	O. & M. active—percent
1978	.15	.15
1979	.15	.13
1980	.06	.05
1981[1]	.14	.06

[1] Excudes foreign currency and HAC directed lapse. The downward trend demonstrates the Air Force's aggressive management initiative to keep lapsing O. & M. balances to a minimum. It indicates a highly efficient use of funds when one considers the large number of funding points and transactions on which management reserves are required. Financial managers at all levels are charged with preventing overobligations due to unforeseen price increases, and the sheer size of the Air Force accounting system dictates a nominal reserve every year. We feel our history shows, that a lapsing balance of approximately $20 million is reasonable for prudent financial management of our O. & M. accounts. When the unusual lapsing balances, namely foreign currency and the HAC directed lapse, are excluded, the fiscal year 1981 Air Force O. & M. lapsing balance was one of the lowest in recent history. A reduction to the fiscal year 1983 request would not affect the lapsing balance in any way—it would merely be a reduction which would have to be accommodated.

UNUSED FUNDS DUE TO LATE RECEIPT OF APPROPRIATIONS

Senator **Levin**. How much of unused funds in these years is attributed to late receipt of appropriations from Congress in the form of supplementals?

General **Geran**. The Air Force cannot quantitatively determine how much of the lapsing balances are caused by late supplementals. It should be noted that once Congress has acted, lead time is required to obtain the requisite paperwork from OSD, OMB, and the Treasury, as well as for headquarters and intermediate commands to distribute funds. Late supplemental appropriations put much stress on field activities and severely limit their flexibility and planning. Contractors are also aware of the impending year end deadline. If supplementals and reprogramings were approved earlier in the year, there might be a small impact on the normal lapsing balance amount. However, O. & M. lapsing balances will always be necessary for responsible financial management to preclude overobligations due to unforeseen price increases.

CINC CONTINGENCY FUND

Senator **Levin**. General Geran, the fiscal year 1983 O. & M. budget includes a new $100 million contingency fund called the Commanders-in-Chief Readiness Fund. These funds will be controlled by the Chairman of the JCS, and are for as yet unknown readiness improvements. Apparently, if one the Commanders-in-Chief has a good idea to improve readiness during fiscal year 1983, they can simply go to the Chairman of the JCS and get the money to carry it out. I am not asking you to justify this new program. It certainly seems to me to fall in the "nice-to-have" category rather than the "hard requirements" category.

My question to you as Director of the Air Force O. & M. account is: Is there not enough flexibility in the O. & M. accounts through existing reprograming procedures to accommodate high-priority, readiness-related requests from Air Force field commanders. What types of readiness related requirements cannot now be met out of the Air Force's O. & M. account that require a special contingency fund of this nature?

General **Geran**. In my opinion, the existing reprogramming procedures do not allow the flexibility and quick response needed to meet the type of contingencies which would be supported from the Commanders-in-Chief Readiness Fund. Contingencies in the past, such as the AWACS deployment to Saudi Arabia, have largely been funded at the expense of existing, valid Congressionally approved programs. The thrust of the Commanders-in-Chief Readiness Fund is to provide support for those items which are primarily tri-service or JCS unique, and for which an individual Service has not budgeted. It also provides quick response and a centralized JCS control to preclude duplication.

Reprogramings, on the other hand, are vehicles for the Services to identify funds for which there have been changes in requirements or that are deemed to be of a lower priority, and to apply these resources to more urgent requirements. In other cases, reprogramings merely reflect a redistribution of resources by budget activity to reflect organizational and functional changes. In sum, they are a useful means to reallocate in-house resources and still maintain the integrity of Congressional appropriations. They are not responsive, however, to fast reaction contingencies such as deployments because of the amount of time required for internal processing and Congressional review, and the fact that offsetting resources may not be readily available.

Specific contingency actions or other readiness related requirements that occur in fiscal year 1983 cannot now be forecast or they would be included in the Air Force budget request. The Commanders-in-Chief Fund is being proposed for this very reason—to respond to these unforeseen contingencies and readiness requirements.

Senator **Levin**. Can you think of specific examples in the past year of high-priority readiness initiatives requested by the field commanders that could not be accommodated?

General **Geran**. There were and are deferrals due to lack of funding but because of the very definition of "high-priority readiness initiatives", these are usually not among them. "High priority" is the key phrase. Field commanders, by necessity and design, have the flexibility in O. & M. to fund their highest priority requirements. However, that flexibility is constrained by reprogramming limitations between major force programs and the high fixed-cost ratio of O. & M. during the execution year (80–85 percent for open-the-door base operations bills). These must-pay fixed costs have caused high priority readiness programs to be deferred during austere funding years such as fiscal year 1979 and fiscal year 1980. The funding shortfall in those two years was large enough to force commanders to defer things like TAC deployments, RED and BLUE Flag exercises, weapons training deployments, interoperability exercises with allies, munitions movements/realignments, readiness related facility projects, and depot purchased equipment maintenance.

Fiscal year 1982 funding is not as austere as fiscal year 1979 and fiscal year 1980; however, we still have some serious concerns. The fiscal year 1982 civilian pay raise supplemental, although not yet submitted to Congress, concerns us because absorption of any amount of that requirement will force the deferral of real property/equipment maintenance, postponement of living and working condition improvements, and hiring restrictions; all with an attendant adverse impact on operational capability and readiness.

The fiscal year 1982 program supplemental, which you are reviewing, also requests funds for some must-pay bills and for real property maintenance. The postal rate increase, veterans education assistance, public health service, unemployment compensation, and per diem equity requirements are must-pay. The real property maintenance fund request will bring the fiscal year 1982 backlog (BMAR) down to the level shown in this budget ($307.3 million; still slightly above the Congressional containment level). Forty-six percent of the fiscal year 1981 actual BMAR was readiness related facility maintenance and repair. These must-pay bills will be paid, and without additional funding, will cause deferral of more programs affecting today's readiness (facility/equipment maintenance) and people programs (living and working condition improvements).

The impact of absorbing pay/program supplemental requirements is compounded because we are already faced with hardcore requirements that we have absorbed or, are still unfunded, such as CORONET GUARD ($0.5M), AWACS to Egypt ($5.5M), CADIN-Pinetree bill ($7.7M), Southwest Asia support ($24M), ATLAS engine hot-fire tests ($13.2M), communications tariff rate increases ($26.0M), and medical supplies ($3.0M).

ENLISTED TRAINING

Senator LEVIN. General Geran, the chart on page 32 of your statement shows a sharp increase in the average length of classroom training for individual enlistees in the Air Force.

What is the reason for this sharp increase?

General GERAN. During the past decade these initial skill training programs have been drastically reduced to accommodate an overall force drawdown and intense budgetary pressure to shorten the training pipeline. Average course length for this category of training was reduced 35 percent during that period, primarily by eliminating most theory and fundamental training, and providing new airmen with only a narrow range of skills for their first job assignment. The reduction of training programs and the loss of experience resulting from low first and second term reenlistments placed a heavy burden on unit On-The-Job Training (OJT) programs. The OJT difficulties plus a wide range of new systems entering the Air Force clearly indicated a need to put some training back into the classroom. Because the training shortfalls are primarily in the hard technical skills, our training increases are concentrated in communication-electronics, avionics maintenance, and aircraft maintenance career fields. These are areas where a lack of training has a significant mission impact. The increase in initial technical training between fiscal year 1982 and fiscal year 1983 represents a growth of only 6.5 percent at a time when technology is increasing in all that we do. This increase is a catch-up measure after years of decline.

LENGTH OF COURSE SATISFACTORY

Senator LEVIN. Do you have any hard evidence that the course lengths at the present time are not adequately preparing people for their jobs in the field?

General GERAN. Yes sir. There is substantial evidence that initial skill training has not been adequate. For example, in fiscal year 1981 there was a 20 percent increase in average time required for our enlisted personnel to upgrade from semi-skilled (3-skill level) to the journeyman (5-skill level) in unit On-The-Job Training (OJT) programs. Our Air Force Communications Command reported a ten percent increase in telecommunications outages in calendar year 1980, with maintenance errors increasing by 14 percent, attributable to a lack of adequate troubleshooting and system knowledge on the part of junior enlisted personnel. We also have had a number of Air Force Functional Management Inspections (FMIs) (which examine the status of a particular Air Force specialty or function throughout the Air Force) that have identified serious initial skill training deficiencies in critical aircraft maintenance and munitions specialties. Despite recent improvements in overall Air Force enlisted retention, many highly technical skills (Aircraft Avionics Specialties, for example) remain critically short of qualified people.

COST OF INCREASE IN COURSE

Senator LEVIN. What is the total cost of this increase in fiscal year 1983?

General GERAN. Approximately $24.5 million including student, instructor and support personnel pay and allowances.

WAR RESERVES AND SUSTAINABILITY

Senator LEVIN. General Geran, the Chairman of the Joint Chiefs of Staff, General Jones, has testified before the committee this year that the 5-year defense plan to improve the sustainability of our forces—the number of days they have sufficient ammunition, fuel and spare parts and other supplies to be able to continue to fight—does not accomplish this objective as quickly as desirable.

Do you agree?

General GERAN. Although our fiscal year 1983 5-year defense plan will make major contributions to our ability to sustain our forces, it is generally true that we are accomplishing our sustainability objectives as quickly as we would like. Our plan was developed to give us the optimum mix of readiness and sustainability for our existing forces, modernization efforts to meet future threats, and increased force structure to counter our potential enemies' numerical superiority. In short, we are not achieving our sustainability objectives as rapidly as we would like to because of the need to balance competing priorities. I believe we have done that well.

AREAS NOT ADDRESSED

Senator **Levin**. What particular areas in our war reserve stocks or in any of our other sustainability needs are not being addressed rapidly enough, in your opinion?

General **Geran**. In general, within the fiscal constraints of the fiscal year 1983 budget, we are addressing our sustainability needs as rapidly as possible. In fiscal year 1982 we made a substantial effort to correct major sustainability shortfalls in both our spares (WRM) and munitions accounts. We continue to have shortfalls in all sustainability items including POL storage, modern munitions, prepositioned stocks, war consumables, and other war reserve materials (OWRM). However, we must balance these sustainability needs with requirements for readiness training and force structure modernization and expansion, as well as our industrial production capabilities.

SHORTFALLS/WAR RESERVE STOCKS

Senator **Levin**. General Geran, what are the principal shortfalls in the Air Force's war reserve stocks today?

General **Geran**. The principal shortfalls are other war reserve spares for the Tactical Air Forces and all categories of modern munitions.

PROGRAMS IN ELIMINATING SHORTFALLS

Senator **Levin**. What progress will be made in eliminating these shortfalls in the fiscal year 1983 budget? What will the shortfalls look like at the end of the current five-year defense program?

General **Geran**. The other war reserve spares for the Tactical Air Forces do not begin funding until fiscal year 1984. The fiscal year 1983 program of $1.4B for munitions continues the procurement of modern munitions consistent with production capability. By the end of the FYDP funded delivery period we will meet our mid term sustainability objectives for both other war reserves spares and munitions.

REAL GROWTH IN OVERHEAD COSTS

Senator **Levin**. The budget activity entitled Administration and Support in the Air Force O&M account grows by over 14 percent in fiscal year 1983, more than double the rate of inflation.

Is not this just an overhead account? What is the reason for this large rate of growth in fiscal year 1983?

General **Geran**. The budget activity called "Administration and Associated Activities", or Force Program 9, is not really just an overhead account. In addition to the Departmental Headquarters costs, it also contains funds for a variety of Air Force-wide support functions (such as the Air Force Audit Agency, Inspection and Safety Center, and data automation activities) which are an integral part of Air Force mission activities.

The growth from fiscal year 1982 to fiscal year 1983 is $46.6 million (from $341.9 million to $388.5 million) or 13.6 percent. The growth is comprised of the following items:

	Millions
Inflation	$19.1
Automatic data processing programs (includes $9.1M for phase IV, $4.0M for HQ USAF information management systems, $1.5M for accounting and finance support)	15.3
Productivity investment program	7.6
Increased civilian man-years (no increase in end-strength)	3.7
Net increase all other items	.9
Total	46.6

Senator **Humphrey**. I want to thank you very much for your testimony and your time this morning. Your prepared statement will be made a part of the hearing record following your testimony here this morning.

[Brig. Gen. Daniel B. Geran's prepared statement follows:]

PREPARED STATEMENT OF BRIG. GEN. DANIEL B. GERAN, DEPUTY DIRECTOR OF BUDGET (OPERATIONS), COMPTROLLER OF THE AIR FORCE

Mr. Chairman and Members of the Committee:

I am pleased to appear before this Committee to present and discuss the Air Force Operation and Maintenance (O&M) budget requests for FY 1983. My statement will compare the FY 1983 budgets with FY 1981 and FY 1982 funding levels (actual and budgeted) for the Active and Reserve Forces, and will highlight the forces, manpower, programs and resources supported by O&M funds.

The following is a summary of the FY 1981-83 O&M budgets:

	($ Millions)		
	FY 1981	FY 1982	FY 1983
O&M, Air Force	$14,742	$16,124	$17,945
O&M, Air Force Reserve	599	670	766
O&M, Air National Guard	1,519	1,648	1,762
Total Air Force	$16,860	$18,442	$20,473

I will first discuss the O&M, Air Force budget, and then those of the Air Force Reserve and Air National Guard.

OPERATION AND MAINTENANCE, AIR FORCE

The O&M appropriations, along with the Military Personnel appropriations, finance the day-to-day business of the Air Force. O&M funds buy the resources to operate and maintain weapon systems and facilities, purchase supplies, equipment, fuel and contract services, and pay civilian employees.

The following table shows the O&M funding, actual and

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proposed, for the active Air Force, FY 1981-83:

O&M, AIR FORCE

BY MAJOR FORCE PROGRAM

($ Millions)

	FY 1981	FY 1982	FY 1983
Strategic Forces	$2,876.3	$3,192.8	$3,084.5
General Purpose Forces	3,220.2	3,597.2	3,832.6
Intelligence and Communications	1,005.2	1,150.0	1,417.5
Airlift Forces	1,044.6	1,179.5	1,202.2
Central Supply and Maintenance	4,689.4	4,891.2	6,034.5
Training, Medical and Other General Personnel Activities	1,547.7	1,763.2	1,978.1
Administration and Associated Activities	354.0	335.2	382.5
Support of Other Nations	4.9	8.1	6.8
TOTAL*	$14,742.2	$16,123.9	$17,944.7

* May not add due to rounding

The increase from FY 1982 to FY 1983 is $1.821 billion. This increase is comprised of $683 million for budgeted price growth (inflation) and $1.138 billion for program changes. Not all of this program growth, however, is real growth. For example, the Air Force is requesting $350 million of additional obligational authority in FY 1983 to permit continuation of the economical practice of letting 12 month depot maintenance contracts anytime during the year. These contracts will be

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funded within O&M rather than within the Industrial Fund, in accordance with Congressional direction. This policy change will be addressed in more detail later. Details on the price increases and program changes are provided in the following pages.

The FY 1982 funding displayed in the foregoing table reflects proposed supplementals included in the January 1982 budget:

FY 1982 O&M, AIR FORCE CHRONOLOGY

($ Millions)

FY 1982 Appropriated by Congress to date	$16,080
January 1982 Program Supplemental	+103
Foreign Currency Adjustments	-55
Transfers	-4
January 1982 Budget Estimate	$16,124*

* Excludes proposed pay raise supplemental of $162.5 million.

ESTIMATED PRICE GROWTH

The FY 1983 estimated price growth of $683 million includes growth increases for non-personnel purchases, the FY 1982 pay raise effect as well as the annualization of the FY 1982 pay raises and the FY 1983 Foreign National Indirect Hire pay raises. by including price growth, the budget request becomes a more

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realistic estimate for the cost of O&M programs; and by providing for price growth, the Appropriations Act will more closely reflect the funding needed to execute the approved programs efficiently and effectively.

($ Millions)

Category	FY 1983 Budget Request	Amount Included for Price Growth
Civilian Personnel	$2,925	$156
Travel	433	10
Stock Fund (SF)	4,730	-71
Industrial Fund (IF)	2,914	118
Transportation	875	22
Other Purchases	6,068	306
TOTAL	$17,945	$683

WHAT O&M BUYS

Although O&M funding is critical to readiness, the O&M account is not well understood by many who have an otherwise excellent knowledge of military affairs. Even members of the armed forces often have a limited knowledge of the amount and what it buys. O&M buys such an array of programs and elements which support operational missions, as well as such a volume and variety of goods and services, that it is difficult to grasp the full range and importance of the account.

The O&M appropriation provides the money that integrates and sustains acquisitions made through other appropriations. For

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example, hardware bought with procurement appropriations is operated and maintained with O&M funds. Facilities built with military construction funds are supported and maintained with O&M funds. The health, morale, and welfare of the makers of readiness -- people -- are directly dependent upon the level of O&M funding. O&M also buys the training our people need to operate and maintain equipment and facilities.

In terms of aggregate physical plant, major units, combat training activities, and other gross quantitative indicators, the following kinds of things are acquired and/or supported with O&M funds (FY 1983 data, includes Reserve Forces).

- Major installations - 133
- Aircraft flown and maintained -6,622 (total aircraft inventory)
- Flying hours - 2,333,803 (O&M, AF funded)
  - -- AVPOL - 55,840
  - -- Ground - 8,661
- Personnel paid or supported -
  - -- Military - 600,018
  - -- Civilian - 148,762 (O&M, AF funded)
- Buildings maintained, heated and lighted - 501 million

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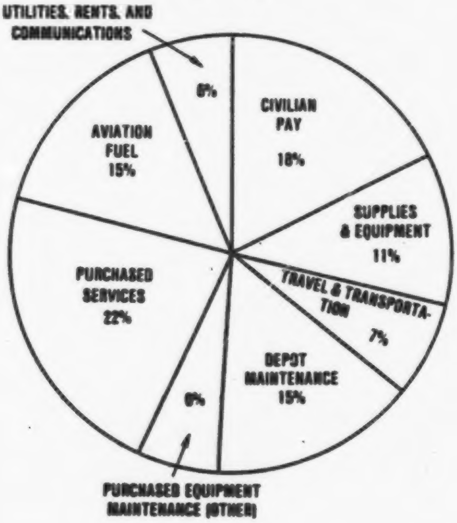
square feet (including Air Reserve Forces)

- Airfield pavements - 250 million square yards
- Roads and streets - 12,000 miles
- Replacement value of plant - $96 billion (in FY 1982 dollars)

The Air Force budgets, manages and administers its funds by Major Force Program (previously shown). However, to some, it is more comprehensible to look at what O&M buys in terms of commodities, that is, broad classes of goods and services. The following chart shows the composition of O&M costs by commodity class.

O&M COSTS BY COMMODITY
(FY 1983)



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O&M AND READINESS

The military might of a nation has traditionally been measured in terms of troop strengths and quantities of hardware: divisions, tanks, aircraft, missiles, and ships. Any assessment of military capability based exclusively on quantitative analysis ignores the essential element of combat readiness. Readiness can be defined as the ability of military forces, units, weapon systems, equipment and personnel to perform functions for which they have been designed, organized or trained. As such, it is an element of overall military capability, along with the forces in being (force structure), age and technological capability of weapon systems and equipment (modernity), and the ability to continue effective military operations over an extended period of time (sustainability).

Every O&M dollar the Air Force spends contributes to readiness in some way. However, since much of the Air Force O&M budget is spent on programs with behavioral outcomes rather than programs where it is possible to count tangible results, it is difficult to precisely quantify the readiness impact of every O&M expenditure. For example, it is difficult to quantify the additional readiness derived from one additional flight by an aircrew. Even more intangible is the effect on morale and readiness generated by painting a barracks or buying new dormitory furniture. Despite this difficulty, the relationship between the programs O&M buys and the day-to-day readiness of the Air Force is fairly obvious.

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MAJOR INSTALLATIONS

The number of major installations operated and maintained by the Air Force is shown in the following table:

MAJOR AIR FORCE INSTALLATIONS

(End Year)

	FY 1981	FY 1982	FY 1983
United States & Possessions	107	106	104
Foreign Countries	27	28	29
Total	134	134	133

The decrease in FY 1983 in the United States reflects planned reductions in the scope of Air Force operations at Fort Lee and Hancock.

AIRCRAFT INVENTORY AND FLYING HOURS

Approximately 35 percent of the total O&M budget goes for support of flying operations. A large part of the depot maintenance program, all of the aviation petroleum-oil-lubricants (AVPOL), and about 32 percent of the supplies purchased with O&M funds are used to support flying operations.

Aviation POL and supplies are generally understood. Aviation POL is the fuel consumed in the flight of aircraft and in maintaining and testing of engines. Supplies are the replacement parts used by field maintenance organizations to repair aircraft.

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Expenditures for aviation fuel, supplies, and depot maintenance are generated by flying hours, but just as important as the hours themselves are where and how they are flown. Straight and level flight, for example, does little to prepare a fighter pilot for war. An aircrew must practice what will be done in actual combat. Training must be rigorous and realistic so that crew members can exploit the full potential of their weapons. When aerial weapons were limited to machine guns and conventional bombs, effective training could take place almost anywhere. As weapons have become more expensive and more lethal, "live" practice with weapons has been limited. Electronic simulation devices have, to a large extent, supplemented practice with actual weapons.

To meet this training challenge, the Air Force has established highly sophisticated training ranges at the Tactical Air Warfare Center, the Tactical Fighter Weapons Center, and other weapons training sites. On these ranges, aircrews can simulate weapons releases against simulated enemy defenses. These ranges and the simulation devices, such as Air Combat Maneuvering Instrumentation (ACMI), are supported with O&M dollars.

To use the ranges, we must move the aircrews there. For example, we may deploy an F-4 squadron from Moody AFB, Georgia, to the range near Nellis AFB, Nevada, or an F-111 squadron from RAF Lakenheath, UK, to Aviano AB, Italy. When a squadron is

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[redacted]

deployed, its maintenance capability goes with it. We airlift maintenance people, spare parts, tools and equipment, and we reimburse aircrews and maintenance personnel for their additive living costs. All these transportation and TDY costs are paid with O&M dollars.

Training deployments produce other readiness benefits. Units based in the U.S. can become more effective by deploying to Europe or the Pacific to train in the environment in which they may fight. We improve the effectiveness of our alliances by conducting exchange and interoperability exercises with allied nations. These exercises require significant expenditure of O&M funds, but have a high payoff in readiness training. For aircrews and maintenance personnel to perform the duties for which they train, they must have the weapons, parts, and supplies they need. Transportation of materiel from supply centers in the United States to the using unit, wherever it might be, is paid with O&M funds.

The following table shows the active aircraft inventory and the flying hours directly funded by O&M funds.

O&M, AIR FORCE
ACTIVE AIRCRAFT INVENTORY
AND
FLYING HOURS

FY 1982			FY 1983		
PAI	TAI	Flying Hours	PAI	TAI	Flying Hours
5,814	6,421	2,240,888	5,961	6,533	2,333,803

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The primary active aircraft inventory (PAI) is the inventory of aircraft authorized and assigned to units for the performance of their operational missions. The total active aircraft inventory (TAI) is the inventory of aircraft that includes the primary active aircraft inventory (PAI) and the backup aircraft inventory (BAI). The backup aircraft are those authorized to units to permit scheduled and unscheduled maintenance, modifications, inspections and repair without reduction of aircraft available for the operational mission. Changes in the flying hour program are correlated more closely with changes in PAI than with changes in TAI, since PAI is a factor in determining the allocation of flying hours to units.

The total primary aircraft inventory increases by 147 aircraft in FY 1983 primarily as a result of the Air Force's modernization program and includes F-15, F-16, and A-10 new production aircraft being delivered in FY 1983.

The O&M flying hour program has an increase of 92,915 hours in FY 1983 resulting primarily from increased flying activity by our tactical fighter force aircrew members and the hours required to support the additional aircraft entering the inventory, plus the planned growth in the European-NATO Joint Jet Pilot Training (ENJJPT) program.

The development of the Air Force flying hour program follows the same general planning, programming, budgeting and execution phases as other O&M programs. The program is designed to meet

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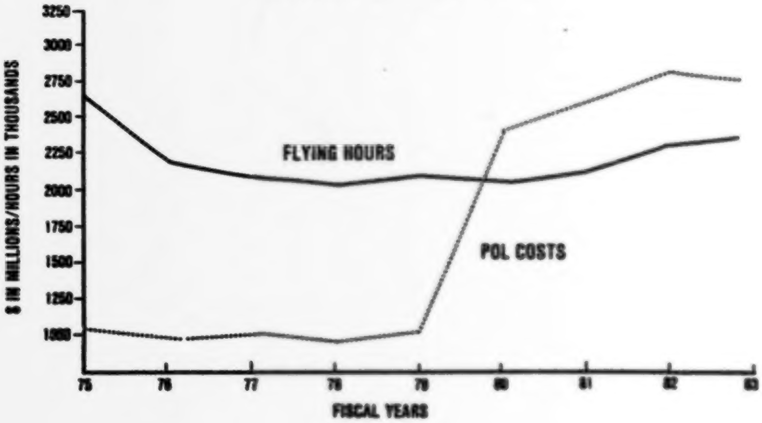
aircrew training requirements to ensure a responsive and ready force. The two major factors in the development of the program are aircrew requirements and sortie generation capability. In close coordination with the Major Air Commands, the Air Force establishes its program based on the lower of these two factors. The Air Force recognizes that any growth in the flying hour program must consider logistical supportability and aircrew availability along with aircrew requirements.

The following chart graphically portrays the trend in flying hours and aviation fuel costs from FY 1975 through FY 1983.

O&M, AIR FORCE
POL COSTS & FLYING HOURS



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DEPLOYMENTS

The deployment of U.S. AWACS to Saudi Arabia is projected to last until delivery in FY 1986/87 of the AWACS approved for sale to Saudi Arabia. The Air Force believes that, considering the Mideast political situation, it is in the best interest of the United States to continue this deployment.

In FY 1981, the cost to the Air Force O&M appropriation of the Saudi AWACS deployment was $37.4 million. This cost took into account those expenses borne by the Saudi government. The USAF borne costs are: per diem, non-fuel flying hour support, contract radar maintenance, and airlift of spares, supplies and personnel.

At the present time no formal agreement exists between the Saudi government and USAF; however, informally the Saudis have agreed to continue sharing expenses.

In FY 1982 and FY 1983 the budgeted estimates for the AWACS deployment are based on the assumption that the Saudi government will continue to share expenses. Operating costs budgeted are $33.5 million in FY 1982 and $35.6 million in FY 1983.

Additionally, the Air Force will be required to provide continued support in FY 1983 for activities in Southwest Asia (SWA). These activities are not programmed or budgeted for in

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either FY 1982 or FY 1983. There is an FY 1983 unbudgeted amount of approximately $14 million for facility upgrades, travel and transportation costs, and payments to host nations.

B-52D FORCE

In accordance with Congressional direction, the Air Force is retaining all five B-52D squadrons through the end of FY 1982, with two squadrons remaining operational until the B-1B becomes available in the FY 1985/FY 1986 timeframe. This is an affordable response to Congressional direction which minimizes strategic rebasing perturbations, makes efficient use of our tanker force, and provides a readily available experienced manpower pool for the B-1. Additionally, the Air Force plans an external modification to 67 B-52Gs in FY 1983/FY 1984. This will provide flexibility for conventional power projection until the B-52Gs transition formally into the conventional role as the last two B-52D squadrons retire.

The Air Force will continue to review force beddown as we approach delivery of the B-1B and the Advanced Technology Bomber weapon systems. However, the retirement of these B-52D squadrons (and the Titan II missile system) will free up critical resources for higher priority programs that are designed to end the decline in U.S. strategic capability and create a deterrent that is far more stable and secure than exists today.

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The following table shows a comparison of Air Force military and civilian personnel for FY 1981-83:

MILITARY AND CIVILIAN PERSONNEL

(End Strength in Thousands)

	FY 1981	FY 1982	FY 1983
Military (active forces only)	570,302	580,796	600,018
Civilian	246,165	247,703	243,346
O&M, AF	150,801	151,528	148,762
Industrial Fund	41,691	41,619	39,855
RDT&E, AF	18,813	19,181	19,397
O&M, AFR	11,107	11,822	12,290
O&M, ANG	23,753	23,553	23,042

The Air Force manpower program for FY 1983 reflects a significant growth in military personnel (+19,222) and a decrease in civilian personnel (-4,357) from FY 1982 levels. The growth in military manpower is primarily to provide for continued force modernization in the general purpose area; wartime readiness initiatives; new weapon systems such as GLCM, ALCM, TR-1, KC-10A, and UH-60A; physical security of nuclear weapons; and training and medical support for our increased forces. These increases

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are partially offset by decreases for phase downs in our B-52D, Titan II, and F-101 force structures.

The decrease in civilian end strength is primarily the result of potential contract conversions under the OMB Circular A-76 Cost Comparison Program, downward ceiling adjustments, reductions in commissary manpower, and continued implementation of the Joint Surveillance System (JSS).

CONTRACT CONVERSIONS

Contracting for accomplishment of commercial activities continues as a part of our overall effort to reduce Air Force operating costs. Workloads which a formal review procedure determines do not require either military personnel or in-service civilian personnel are considered for potential contract performance in accordance with OMB Circular A-76. This essentiality review ensures that our combat readiness is not compromised before workloads are programmed in the budget process for an OMB Circular A-76 comparative cost analysis. Such cost comparisons are conducted to compare the total government cost of the most efficient in-house operation to the total cost of contracting such services. The decision to perform in-service or by contract is based upon the results of the cost study -- the more cost effective method of performance is selected. Contractor performance is subsequently monitored to ensure that we continue to receive the most service for the lowest cost.

In FY 1982 and FY 1983, we will conduct over 500 cost comparison studies involving about 10,000 manpower

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authorizations. These and subsequent studies will comply with Section 502 of the FY 1981 DOD Authorization Act. Congressional notification of the FY 1982 cost comparison program was made in February 1982, and we anticipate announcement of the details of the FY 1983 program soon.

The Air Force is a leader in effective management of the cost comparison program for contracting commercial activities under OMB Circular A-76. We have been successful with this program because of the rigorous review process we employ to determine the eligibiltiy of activities for contract and the overall impact on wartime capability. However, because we have aggressively pursued this program, the Air Force has already cost compared its most eligible activities. The imposition of large scale contracting objectives poses a risk of degrading our wartime capability or forcing us to begin to infringe upon military benefits programs such as commissaries and morale and welfare type activities. The Air Force is also approaching, in fact, we may have already reached, its maximum capability to conduct cost comparison program studies without significant additional resources. It now takes approximately two years from announcement of a cost comparison program to completion of all studies. The addition of continually larger programs builds up a bow wave of studies which tax available resources. The Air Force supports continuation of a moderate contracting program, but seeks relief from increasingly larger programs. The development of simplified, streamlined cost comparison procedures for smaller functions would also assist in conducting a rational program.

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DEPOT MAINTENANCE

The depot maintenance programs (DPEM) provide for centralized maintenance and modification of aircraft, missiles, engines, other major equipment, and exchangeable subassemblies and components, that are managed at the Air Logistics Centers. The current annual expenditure of more than $2 billion for depot maintenance is large in dollar terms, but it is small in comparison to results. The funds spent for depot maintenance either maintain or improve war fighting capability. Combat training must be rigorous to be effective. Under the stress of such training, equipment can deteriorate rapidly. Air Force equipment is also exposed to the elements in some of the world's harshest environments. Since we fight with the weapons we train with, deteriorated equipment must be restored or replaced. By restoring equipment to a ready state, depot maintenance helps us avoid tremendous investment costs.

Besides deterioration, we must deal with obsolescence and the resulting need for new capabilities. In many cases, we avoid buying new equipment by modifying existing systems. The C-141 stretch and the B-52 cruise missile conversion are examples of current modifications. Although modifications are bought with procurement funds, installation of the parts and kits is an O&M cost -- whether accomplished by contractors or by in-house personnel.

The significance of aircraft modifications is reflected in the fact that, as a percentage of new aircraft procurement costs,

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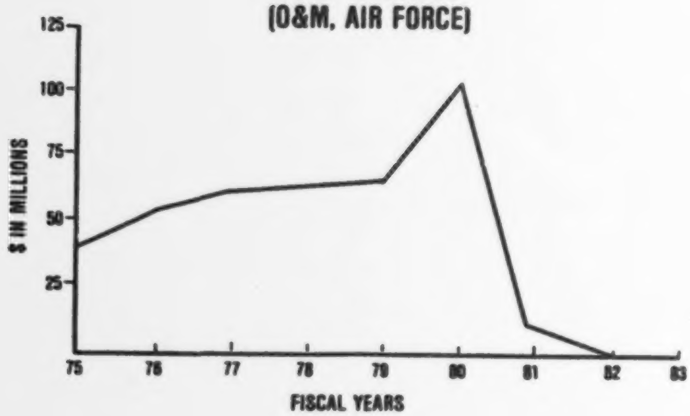
modifications have grown from 34 percent to 45 percent in the FY 75-83 period. This impact has been an important factor in the growth of the depot maintenance program over those years.

As a result of increased funding in FY 1982-83 budgets, the Air Force plans to eliminate the backlog of items awaiting depot maintenance by the end of FY 1982, and to hold the backlog at zero through the end of FY 1983. The depot maintenance backlog reached a high of $103 million at the end of FY 1980. The following table and chart show the Depot Purchased Equipment Maintenance (DPEM) backlog at the end of those fiscal years (actual and projected):

	($ Millions)			
	FY 1980	FY 1981	FY 1982	FY 1983
Funding	$1,684	$2,168	$2,472	$3,197
Backlog	103	12	0	0

DPEM BACKLOG
(O&M, AIR FORCE)



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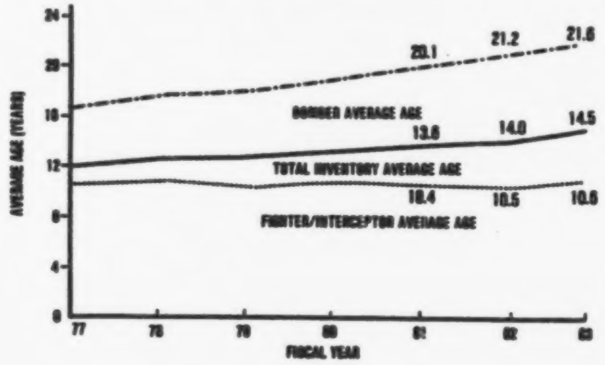
A zero depot maintenance backlog improves our force readiness and cost effectiveness by fully supporting the operational units, increasing surge support capability, minimizing weapon system down-time, reducing carry over price growth, and increasing maintenance effectiveness/productivity (through reduced cannibalization).

The four major factors that drive the requirement for depot maintenance are the number of aircraft in the inventory, the hours flown, the complexity of aircraft and their systems, and the age of the aircraft. The trends in number of aircraft and flying hours are portrayed on earlier charts. The growing age of the aircraft in the inventory is illustrated on the following chart and table.

PROJECTED AVERAGE AGE OF
ACTIVE AIRCRAFT INVENTORY



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AGE OF AIRCRAFT

Fiscal Year	Inventory	No. 9Yrs +	% 9Yrs +
1964	15,214	5,173	34%
1973	10,799	5,076	47
1974	10,156	5,383	53
1975	9,334	5,134	55
1976	9,287	5,758	62
1977	9,256	6,295	68
1978	9,138	6,671	73
1979	8,959	6,757	75
1980	9,073	6,968	77
1981	9,180	6,94	76

The foregoing data indicates that in spite of the ongoing modernization program, the average age of aircraft in the force grew perceptibly over the past two decades. For example, the percentage of aircraft over nine years old went from 34 percent in FY 1964 to 77 percent in FY 1980. This aircraft aging is reflected in the increased cost of aircraft repair, maintenance and modification.

DEPOT MAINTENANCE CONTRACTING

The Congress addressed the subject of contracting for Depot Maintenance through the Air Force Industrial Fund (AFIF) in their reports on the FY 1982 Department of Defense Appropriations Act. The Air Force was directed to assure that no contracts are let

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without currently available appropriations to finance them. The Air Force will comply with that direction, and actions are underway to do so. However, with more than 2,000 contracts for depot maintenance, there is no practical way to execute that number of contractual actions early in the fiscal year. Breaks in production would occur, causing problems for both the contractors and the Air Force.

Congress further stated that the Air Force may seek the legislative authority to change this directed procedure, but in the absence of such legislation, the Air Force should seek to achieve the objectives outlined by the Senate Appropriations Committee to assure a full transition to this procedure in FY 1983. To prevent disruptions, and yet comply with the desires of Congress, the Air Force is requesting $350 million of additional one-time obligational authority in the FY 1983 budget to permit continuation of the economical practice of letting 12 month contracts anytime during the year. DOD is requesting that the language in Section 708 of the General Provisions to the Appropriation Act be expanded to include depot maintenance contracts. These contracts will be funded within the Operation and Maintenance appropriation rather than with Industrial Funds, in accordance with the Congressional direction.

Since our proposal concerns the manner in which we fund contracts and does not change the actual performance of work, the

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added obligational authority in FY 1983 will have no outlay impact.

WAR RESERVE MATERIEL (WRM) PREPOSITIONING

WRM prepositioning involves the acquisition and in-theater storage of critical supplies and equipment in support of worldwide force projection. Critical supplies and equipment include rations, mission/sortie generation aircraft support equipment, civil engineering supplies and equipment, bare base facilities and equipment, motor vehicles, munitions, and other support items to maintain lines of communication, generate combat sorties, and turn around aircraft.

The O&M appropriation contains funding for the manpower, maintenance and prepositioning of these assets. Generally the WRM assets are designed to augment an austere base (Harvest Eagle) and to provide lightweight, modular, expandable solid-wall shelters for deployment and erection of mission essential airfield facilities to support wartime operations in a bare/austere environment (Harvest Bare).

The FY 1983 Operation and Maintenance funding is sufficient to maintain 12 Harvest Eagle Sets, 1 Harvest Bare Set, 159 Housekeeping Sets, 15,000 prepositioned small arms, 8,000 individual equipment sets, prepositioned tanks, racks, adapters and pylons, and 6,000 WRM vehicles. The FY 1983 O&M account includes the purchase of $7.1 million in new assets to support

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the rapid deployment mission in Southwest Asia and the purchase of $1.3 million in new assets being received to support the NATO prepositioning program.

In the prepositioning of the WRM equipment, innovative approaches have been taken to conserve scarce O&M resources. For example, an estimated $5.5 million in airlift cost was saved by utilizing otherwise empty cargo space on cargo planes dispatched to the Middle East to airlift returning troops and equipment involved in the Proud Phantom and Bright Star 81 exercises.

FACILITY MAINTENANCE AND REPAIR BACKLOG

A large share (roughly 12 percent) of the O&M budget is spent for maintenance of real property and other civil engineering activities. Much of the physical plant in the Air Force is the supporting structure for readiness: maintenance hangars, aircraft shelters, missile silos/launch facilities and runways. Supporting structure is especially important because the Air Force, unlike the other Services, will probably fight from its air bases. Much of the physical plant is of World War II or Korean War vintage, and we are spending large sums of money to maintain facilities which more practically should be replaced, particularly overseas. Operating these old facilities is unnecessarily expensive as well. Shortages of Military Construction funding have caused the Air Force to continue to operate and maintain some marginally effective facilities.

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The primary indicator for evaluating physical plant condition is the backlog of maintenance and repair (BMAR). The BMAR is not a precise measurement of the total maintenance and repair requirement. Rather it is a measurement of essential requirements, previously identified and validated, which were deferred due to a lack of resources. Until recently the major resource shortfall has been O&M funding. As a result, the BMAR increased significantly. Our facilities have deteriorated such that major commands have gone on record to emphasize that we cannot continue the large scale deferral of facility maintenance and repairs. Deferred requirements for airfield pavements, utility systems, and operational/maintenance facilities (all readiness related) now comprise roughly 40-45% of the current BMAR. The remainder consists of deferred requirements in other work, recreation, and living facilities. Continued deterioration in these facilities adversely affects the morale of our people and our retention rates.

Earlier, I mentioned that the BMAR does not represent our total maintenance and repair requirement. The BMAR identifies previously deferred requirements; each year we also generate newly identified maintenance and repair requirements. Thus each year we have a total requirement that includes deferred (BMAR) plus new requirements. Our success in achieving the real property maintenance/BMAR goals set forth in our budget request is highly dependent on the accuracy of our projections for total

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requirements. Two major factors impact that accuracy. First, if the actual rate of inflation exceeds the budgeted rate, we experience a shortfall of funding to match against projected requirements, i.e., our O&M dollars lose purchasing power. Second, if the identification, or generation, of new requirements during budget execution exceed our projections, we also suffer a shortfall of funding against total requirements. Such new requirements then become deferred at the close of the fiscal year and are subsequently added to the BMAR. As our field commanders have seen increased support and funding for their facility problems, they have made concerted efforts to identify and validate their total maintenance and repair requirements. Consequently, we have experienced an increase in new requirements being identified -- such that our projections have been exceeded.

Nevertheless, the Air Force is making a concerted effort in FY 1982-83 to reduce the backlog of maintenance and repair (BMAR) of real property facilities to a manageable level. The trend toward an increasing backlog was slowed in FY 1981 and will be reversed in FY 1982. This is shown in the following table and accompanying chart.

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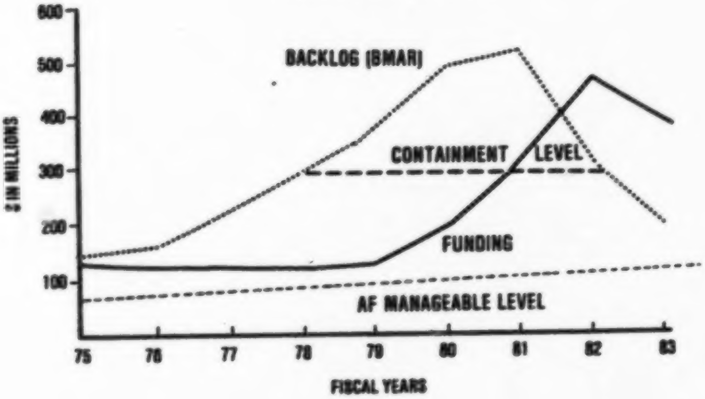
FACILITY MAINTENANCE AND REPAIR
FUNDING AND BACKLOG
(O&M, AIR FORCE)

($ Millions)

	FY 1980	FY 1981	FY 1982	FY 1983
Funding	$189	$322	$494	392
Backlog (BMAR)	489	530	307	188

FACILITY MAINTENANCE AND REPAIR FUNDING AND BACKLOG (O&M, AIR FORCE)



I would just like to add that Congressional support of the Air Force RPMA funding requests has been outstanding over the last five years. As a result, we have been able

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to focus attention on the deterioration of our physical plant and its impact on the Air Force mission and personnel. Our FY 1983 request supports continuation of this effort.

RECRUITING AND ADVERTISING

The recruitment of quality personnel is essential if the Air Force is to continue to meet its critical skill requirements. The O&M resources necessary to meet the recruiting goals in FY 1982 and FY 1983 are as follows:

($ In Millions)

	FY 1982	FY 1983
Recruiting	$35.4	$38.2
Advertising	14.5	15.3
Total	$49.9	$53.5

The Air Force recruiting objectives are as follows:

	FY 1982	FY 1983
Enlisted	75,000	81,300
Officer Training School	3,279	4,685
Health Professionals	1,927	1,337
Total	80,206	87,322

The increase of $3.6 million between FY 1982 and FY 1983 includes $+2.6 million for price growth and $1.0 million for program growth. There is no program growth in advertising as we have aligned our resources to meet our most difficult recruiting areas, including increased emphasis on enlisted prior service and

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engineering officers. The recruiting increase includes support of increased officer and enlisted accessions.

UNDERGRADUATE FLIGHT TRAINING

The Air Force's undergraduate pilot and navigator training production rates reached thirty year and twenty-five year lows, respectively, in FY 1978-79. Since that time, we have steadily increased our production rates, and this effort is continued in the FY 1982-83 budgets. The following table shows the production rates for the period FY 1976-83.

	1976	1978	1979	1980	1981	1982	1983
Pilots	1,659	1,084	1,047	1,543	1,693	2,000	2,000
Navigators	810	472	594	609	683	850	1,000

The undergraduate pilot training (UPT) rates were depressed after the end of the Vietnam war to bring the inventory down to the reduced requirement. However, higher than anticipated losses from the pilot inventory, because of the relative decline in military compensation together with competition from the commercial airlines, resulted in a pilot shortfall beginning in FY 1979. The shortfall for the end of the FY 1982 is projected to be approximately 800 to 900 pilots. The shortfall is not expected to be eliminated until the late 1980's.

A similar situation has existed for undergraduate navigator training (UNT) rates. A shortfall of approximately 300 to 400 is projected for the end of FY 1982. Again, the shortfall will not be eliminated until the late 1980's.

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INDIVIDUAL SKILL TRAINING

Initial skill training is formal training provided by Air Force Training Command leading toward an award of an Air Force specialty designation at the lowest skill level. This training is normally given immediately after a new enlistee has completed recruit training. From FY 1970 to FY 1980 we reduced our average course length for enlisted initial skill training from 16.3 weeks to 11 weeks. This was the result of instructional systems development and course revisions, and a decision to provide training to meet only the minimum requirements of an individual's first job assignment during his or her first enlistment.

As a result of the initial skill course length reductions, increased skill progression training has been required during subsequent enlistments to provide personnel with the additional knowledge to perform at a higher skill level and to operate and maintain new Air Force equipment and systems. Also, because of the loss of second term and career enlisted personnel in our field units, increased skill progression training is required to offset the experienced personnel shortfall.

However, as a result of O&M funding shortages and past travel limitations, our skill progression training loads had been decreasing, rather than increasing to meet the higher training requirements. This was having a direct, adverse impact on readiness.

The following two charts illustrate these trends in our specialized skill training programs. The first chart shows the

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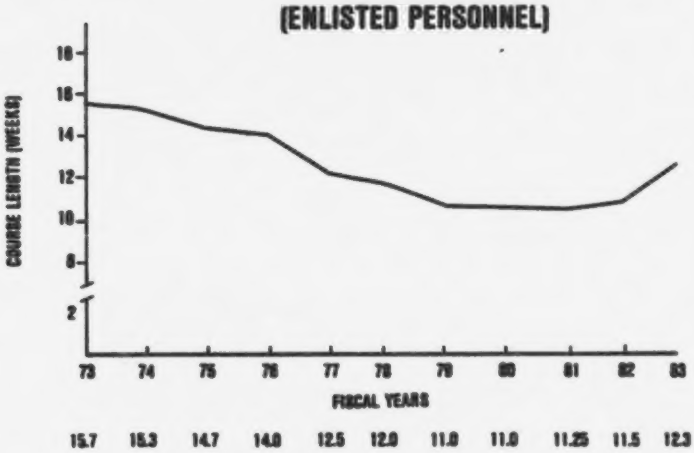
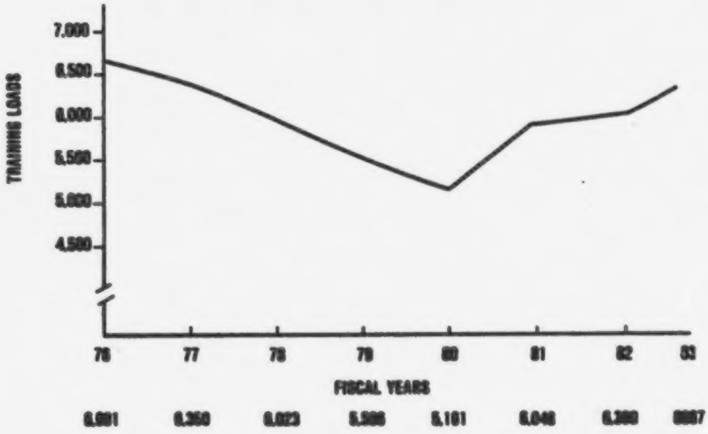
initial skill course length and the second shows skill progression training loads.

INITIAL SKILL
AVERAGE COURSE LENGTH
(ENLISTED PERSONNEL)



SKILL PROGRESSION TRAINING LOADS



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SERVICE CONTRACTS

Our FY 1983 budget request includes $276 million for studies and analysis, consultant services, other professional and management contract services, and for contract engineering technical services (CETS). This provides for an increase of $44 million over FY 1982, consisting of $14 million in price growth, and $30 million in program growth. Approximately $9 million (or 3% of the total FY 1983 program) is for studies and analyses and for consultant services. A larger amount, $41 million (15% of the total) is for the CETS program. Contractor technical representatives provide instruction and training to Air Force personnel in the operation, installation and maintenance of weapons and equipment, particularly for new or modified systems. Often, these systems represent technologies which are new to Air Force operators and maintenance personnel, and for which formal training courses are either limited or non-existent. The importance of properly trained people cannot be over-stated -- since they, along with the proper equipment, produce the day-to-day deterrence.

The largest amount, $226 million (82% of the total) is for what is called professional and management support contracts. It is important to understand what type of services are being purchased with these resources. Service engineering and embedded computer software support of operational weapon systems accounts for $163 million of the total. Modern weapon systems are highly

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complex items requiring an enormous variety of engineering skills. It would be cost prohibitive to man, train and retain in-house personnel for all these skills. In addition, vendors and weapon system manufacturers possess a vast store and history of test reports; drawings, proprietary data, in addition to specialized hardware, which cannot readily be replicated organically. For these reasons, we must rely heavily on contract service engineering. Other important service contracts reported in the category of professional/management services include military recruit advertising, technical support for the Defense Support Program, foreign technology analyses, and so on.

We recognize and share the Congressional concern that resources for all these service contracts be managed prudently. We have taken a number of initiatives to further this objective, including for example, revisions to our accounting system to better track these expenditures. We solicit your support of our budget request in this area.

CADIN-PINETREE

For FY 1982, the House reduced $3.8 million from the CADIN-PINETREE system of Air Defense Radars, but the Conference Committee restored these funds with the understanding that the Air Force and other Federal entities undertake negotiations with the Canadian Government aimed at revising cost-sharing arrangement.

The Department of Defense, through the Joint Steering Group

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on Sharing of Air Defense Responsibilities, met with their Canadian counterparts in December 1981 to discuss a number of air defense issues, including CADIN-PINETREE. Further discussions were scheduled for January and February 1982. We agree with the Conference recommendation on CADIN-PINETREE, and are hopeful that continuing discussion will lead to a negotiated agreement that is more acceptable to both Congress and the Department of Defense.

SPACE OPERATIONS

The Department of Defense is becoming increasingly dependent on space-based assets to conduct effective and efficient military operations. The full integration of space operations in the employment of our terrestrial forces requires that we meet user requirements in terms of factors such as: availability, survivability, performance, supportability and capacity. Space operations include activities necessary to: (1) enable our access to space, (2) protect our resources from threats in and from space, and (3) operate space systems that enhance land, sea, and air forces.

The Air Force is committed to the Space Shuttle program. We support the schedule set by NASA for making the Shuttle operational, and have planned the transition of payloads to the Shuttle accordingly. We have provided backup boosters for early critical national security Shuttle missions to protect against unforeseen difficulties in the program.

As the DoD Executive Agency for space, the Air Force must

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ensure and provide support, force enhancement and defense. Space support operations include launch and recovery activities, on-orbit support, and satellite surveillance and control. Force enhancement includes global surveillance and communications capabilities, worldwide command and control systems, precise positioning and navigational data, and current, detailed, timely meteorological data. Space defense operations include detection, tracking, and identifying all objects in space, timely warning to the National Command Authorities (NCA) of hostile actions against the United States and our allies, developing the capability to deny or nullify hostile acts in or through aerospace, and conducting sustained operations to detect and analyze aerospace threats.

The Space Shuttle will perform space launch services formerly accomplished by a variety of expendable launch vehicles (ELVs). Beyond the objective of providing a reliable, safe, heavy lift and reusable space launch capability, the Air Force will use the Space Transportation System (STS) to routinely perform tasks not possible with expendable launch vehicles and not practical with earlier manned space programs. Compared with existing, expendable space boosters, the Shuttle will offer:

- Increased reliability
- Increased payload, weight and volume capacity
- New capability to conduct on-orbit testing and repair of spacecraft or experiments

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- Ability to conduct medical experiments and tests.

All payloads are being transitioned from expendable launch vehicles to the Shuttle and, under current planning, this will be completed by 1987, except DMSP. However, based on the history of technical risks, program schedules, and grounding of major launch and weapon systems, the Air Force will ensure the availability of backup ELVs until the Shuttle reaches a level of reliability warranting closeout of the current families of ELV capability. Under current guidelines, the Air Force will backup national security missions for the first two years of operation at Kennedy Space Center and for the first year of operation at Vandenberg Air Force Base.

The Consolidated Space Operations Center (CSOC) at Colorado Springs will combine the two mission elements of satellite control and Space Shuttle operations for management, operational, and economic effectiveness. The satellite control element of CSOC will provide communications, command and control service functions for orbiting spacecraft. The Shuttle element will conduct flight planning, readiness, and control activities for DoD shuttle mission.

Space Program growth in FY 1983 amounts to $117.7 million. This growth reflects support of the DoD Space Shuttle launches from Kennedy Space Center and progress toward the initial operational capability for launch and landing site at Vandenberg AFB (October 1985). It includes Vandenberg launch site O&M,

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orbital flight charges paid to NASA, payload integrations, IUS launch services, Kennedy Space Center operations, Johnson Space Center mission operations, and mission assurance of Shuttle systems. Program increases also include overhaul and acceptance testing to increase reliability of the Atlas booster program and launch operations, and recurring logistics support of the Titan IUS launches. Support for satellite control network interface with Johnson Space Center and initial support for the Data Systems Modernization Program equipment are also included.

AUDIOVISUAL PROGRAM

On 20 April 1981, President Reagan signed an Executive Order to the heads of Executive Departments and Agencies imposing an immediate moratorium on the production and procurement of new audiovisual products and the printing and distribution of new periodicals and pamphlets. OMB Bulletin No. 81-16 provided guidance for reporting estimated savings.

On 4 May 1981, Secretary of Defense Weinberger issued a Memorandum which directed an immediate 10 percent reduction in FY 1982 Audiovisual, Periodicals and Pamphlets production.

As a result of this direction, Audiovisual activities and Periodical and Pamphlet production funded in the O&M account was reduced by $5.5 million. The Air Force O&M Budget for FY 83 continues this reduced level of activity in these programs.

AT&T RESTRUCTURE

The potential settlement of the highly publicized AT&T case has generated a flood of publicity and interest. One of our

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prime interests is the potential budget impact. It is too early to quantify that impact now, but in general we expect increases in the cost of leased commercial circuits and equipment. Because of this and recent regulatory actions, we anticipate substantial changes in leased circuit costs and capital outlays to buy previously leased customer equipment. Also, there is a potential increased cost to assume network management functions previoulsy done by AT&T. In the interim, the Air Force is participating in DOD task force to assess the specific impact of these changes.

RAPID DEPLOYMENT JOINT TASK FORCE (RDJTF) HEADQUARTERS

The RDJTF headquarters was established at MacDill AFB, Florida in 1980 to enhance the capability of the U.S. to project power rapidly in response to non-NATO contingencies. RDJTF HQ has reported directly to the Joint Chiefs of Staff (JCS) since 1 October 1981 and is scheduled to become a separate, independent Unified Command with its own geographic responsibilities, support elements, and component forces by 1 January 1983. The Air Force is likely to have continued responsibility for logistical and administrative support of the Headquarters. The manpower level will grow to 569 by August 1982. O&M requirements for the RDJTF headquarters will grow commensurately from $4.6 million in FY 1982 to $6.6 million in FY 1983. This growth of the headquarters is necessary to give the RDJTF Commander the resources required to control and support the component forces and support elements which might be projected into and operated in the RDJTF area of responsibility.

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PEOPLE

Obviously, people are a key resource. No investment in equipment and facilities would produce readiness without a well-trained, confident and dedicated force. We must recruit and retain capable young people, train them to do their jobs, and sustain them and their families. How well we do all these things is dependent upon our ability to reach these young people, and that also means O&M funding. Our recruiting stations, advertising, and the leased vehicles used by recruiters are paid for with O&M funds. Our technical training centers are operated with O&M funds. These centers train recruits in entry level job skills and, as they progress in their careers, the centers provide the skills they need to become senior technicians and managers. When new weapon systems such as the F-15 are bought, instructors and maintenance personnel are sent to the manufacturers' plants for training. With the large turnover of personnel in recent years, requirements to train new personnel have grown steadily.

Once military personnel are trained and in the field, most of their operating support, except for pay and food, is provided by O&M funding. Dormitories are maintained and equipped with O&M funds, and dining halls are operated with O&M funds. Morale, welfare, and recreation facilities receive O&M support. The level of real property maintenance funds determines the condition of working facilities. These types of personnel support costs probably have more impact on retention than anything other than

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pay. Dollars spent for personnel support help avoid much larger costs needed to train replacements for dissatisfied people who leave the Air Force.

There is one significant personnel support-related problem which is affecting the morale, retention, and hence the readiness of enlisted personnel. The loss of per diem equity for enlisted members through a funding restriction in the Fiscal year 1982 DOD Appropriations Act represents our most serious problem in terms of negative impact on morale. Also, the reduction of enlisted per diem reimbursements has the effect of causing a direct pay cut of hundreds of dollars per year for thousands of Air Force enlisted members whose duties require them to be away from home for periods as long as 9 months out of each year (e.g., Cable and Antenna Systems Installation teams; Airborne Meterological Specialists; ATC Mobile Training Teams). In our view, unless these restrictions are completely eliminated at an early date, we may cause increased separations/retirements and ultimately require increased accession and training costs far beyond the anticipated savings.

****

The following pages provide O&M Air Force budget data by major force program for FY 1981-83.

STRATEGIC FORCES

Strategic Forces are combined into two major categories: offensive and defensive forces. These forces provide the capabilities to deter nuclear war, warn of impending attack,

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provide air defense to prevent enemy manned bombers or airborne reconnaissance vehicles from having unchallenged access to the airspace over the U.S., and to defend important areas worldwide against air attack. Funding requirements are summarized in the following table.

	($ Millions)		
	FY 1981	FY 1982	FY 1983
Strategic Offensive	($2,057.2)	($2,256.3)	($2,098.1)
Aircraft	1,301.6	1,3.2.6	1,179.2
Missiles	.2.3	98.7	138.2
Other Offensive Operations	55.9	58.9	69.1
Telecomm & Command Control	88.3	105.7	108.4
Base Operations	525.1	595.4	603.2
Strategic Defensive:	($819.1)	($936.5)	($986.5)
Surveillance & Warning Radars	256.1	268.6	295.2
Surveillance Satellites	86.2	120.0	134.2
Other Defensive Operations	123.4	141.0	143.6
Telecomm. & Command Control	63.7	80.4	92.0
Base Operations	289.7	326.5	321.5
TOTAL*	$2,876.3	$3,192.8	$3,084.5

* May not add due to rounding

Major changes in Strategic Forces resource requirements in FY 1983 include: price growth ($-18.3 million); SR-71 engine overhaul and transportation for special fuel ($+12.6 million); Minuteman service engineering and safety requirements ($+19.9 million); Ballistic Missile Tactical Warning/Attack Assessment

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System ($+4.5 million); BMEWS contract support, primarily for Site III radome replacement ($+1.0 million); PAVEPAWS/FPS-85 support ($+1.3 million); spacetrack contract support, primarily for the new GEODSS site ($+3.0M); Satellite Early Warning System operational support module and Sensor Evolutionary Development (SED) ($+4.2 million); full year cost for phase-in of F-15s ($+1.5 million); and ECM-tow target mission requirement due to phase-out of F-101 aircraft ($+4.5 million). These increases are offset by reductions in travel, service contracts, audiovisual requirements, implementation of handheld calculators (fuel savings equipment), and phase-out of B-52Ds.

GENERAL PURPOSE FORCES

General Purpose Forces consist primarily of the Tactical Air Command, the Pacific Air Forces, and the United States Air Forces in Europe. These forces provide for air superiority, counter-air, interdiction, close air support, reconnaissance and surveillance, electronic warfare, and special operations activities. The following table summarizes General Purpose Forces funding requirements by these categories:

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	($ Millions)		
	FY 1981	FY 1982	FY 1983
Tactical Fighters & Weapons	$1,332.6	$1,636.6	$1,683.4
Tactical Reconnaissance, Electronic Warfare & Special Operations	99.2	105.7	125.4
JCS Exercises	195.4	27.9	28.8
Combat Support	77.7	103.1	116.8
Other Command & Control	142.3	175.3	185.8
Other Tactical Operations	76.7	89.7	108.0
Major Range & Test Facilities	18.8	24.3	34.4
Tactical Intelligence & Special Activities	85.4	126.0	144.2
Telecomm & Command Control	90.2	93.7	96.4
Base Operations	1,101.9	1,214.9	1,309.4
Total*	$3,220.2	$3,597.2	$3,832.6

* May not add due to rounding.

The increases in funding requirements in FY 1983 include price growth of $+48 million. Program increases include funding for War Readiness Materiel (WRM) prepositioning ($+5.0 million), an additional Heavy Repair Engineer Squadron (RED HORSE) ($+2.5 million), and Rapid Deployment Joint Task Force (RDJTF) ($+6.1 million). These increases will enhance our readiness and sustainability in Southwest Asia. There are further increases in support of the tactical flying hours program ($+143 million), beddown of the Ground Launched Cruise Missile ($+5.9 million), and the continuing build of the tactical aircraft fleet ($+29

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million). Additionally, there are increases for the Tactical Fighter Weapon Center Range ($+9.6 million), for tactical intelligence, cryptologic and special activities ($+21.5 million), and for contract conversions ($+13.0 million). These increases are partially offset by decreases in the chemical warfare (CW) defense program ($-8.0 million), WRM supply acquisition ($-11.5 million), service engineering ($-11.2 million), and real property maintenance ($-40 million).

INTELLIGENCE AND COMMUNICATIONS

This program has four major areas of activity: The conduct of national, Department of Defense, and Air Force intelligence and security programs; worldwide communications and command control systems required by both National Command Authorities and the Air Force under all conditions of peace and war; space support activities; specialized functions such as weather service, rescue and recovery, air traffic control, the National Emergency Airborne Command Post, and the National Military Command Center (collectively called service-wide activities); and the base operations functions to support these activities. Funding requirements are summarized in the following table:

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	($ Millions)		
	FY 1981	FY 1982	FY 1983
Telecomm & Command Control	$416.6	$456.0	$506.3
Space Support	134.7	192.2	320.5
Intell and Service-wide Activities	425.3	469.2	559.3
Base Operations	28.6	32.6	31.4
Total*	$1,005.2	$1,150.0	$1,417.5

* May not add due to rounding.

The increases in funding requirements in FY 1983 include price growth ($+ 54.2 million); space launch support buildup ($+99.9 million); space boosters/Atlas Hot Fire ($+12.7 million); Satellite Control Facility ($+5.1 million); weather service ($+6.4 million); Air Traffic Control ($+1.2 million); Electronic Combat Intelligence Support ($+11.8 million); Aerospace Rescue/Recovery operations ($+1.7 million); Office of Special Investigations ($+.9 million); AT&T tariff increase ($+13.0 million); Autovon/Autodin Increase ($+4.6 million); WWMCCS ADP and WWMCCS Information System ($+4.1 million); contract conversions ($+2.1 million); Telecommunications center upgrade ($+2.1 million); Ground Launch/Cruise Missile support ($+1.7 million); Automated Graphics System ($+1.0 million); WWMCCS ADPE maintenance ($+1.0 million); and other Communications Support ($+1.1 million).

AIRLIFT FORCES

This program provides the funds to operate and maintain the Military Airlift Command (MAC). The primary mission of MAC is to

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maintain the readiness of the military airlift systems in support of contingency and wartime plans and operations. This mission has two subsets: strategic airlift and tactical airlift.

The O&M funds requested in this program are for the initial qualification and upgrade training of C-5, C-141, and C-130 aircrews, operation and maintenance of MAC bases, advanced helicopter crew training, command control and communications, maintenance of an operational support airlift system, and field and organizational aircraft maintenance. The funding also supports DOD flying hour requirements for specific airlift missions assigned to the Air Force as a mission/funding responsibility, and local area training for C-5, C-141 and C-130 aircrews.

The peacetime readiness training of the military airlift system provides airlift capability as a training by-product. This by-product satisfies a large portion of the air transportation requirements of the Army, Navy, Air Force, Marine Corps, and other Government agencies by way of airlift services provided on a reimbursable basis by the Airlift Service Industrial Fund (ASIF).

Funding requirements are summarized in the following table:

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	($ Millions)		
	FY 1981	FY 1982	FY 1983
Assigned Airlift Mission	$476.8	$557.7	$565.8
Mission Support	154.2	190.3	192.4
Command Support	14.0	15.4	15.4
Telecomm & Command Control	16.0	18.9	21.1
Base Operations	383.6	397.2	407.5
Total*	$1,044.6	$1,179.5	$1,202.2

* May not add due to rounding.

The increases in funding in FY 1983 include price growth ($+23.5 million), aircraft lease ($+9.0 million), contract conversions ($+6.9 million), other contractual services ($+3.9 million), and command and control communications ($+1.2 million). Offsetting these increases are decreases in facility projects by contract ($-10.5 million), civilian compensation ($-8.3 million), rents and utilities ($-1.8 million), and flying hour and other adjustments ($-1.2 million).

CENTRAL SUPPLY AND MAINTENANCE

Central Supply and Maintenance funds essential logistical support to operating forces worldwide through the functions of distribution, materiel management, prime procurement, contract management, depot maintenance, and first and second destination transportation to operating forces worldwide. In addition to the direct Air Force mission, similar logistical support is provided to the Air Force Reserve, the Air National Guard, other DOD and government agencies, and selected foreign governments. This

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program also supports commissary operations, the Utah Test and Training Range, Eastern Test Range, Western Test Range, the Military Aircraft Storage and Disposition Center, printing and publications, telecommunications, and associated base operations. Funding requirements are summarized in the following table:

	($ Millions)		
	FY 1981	FY 1982	FY 1983
Supply Depots	$246.7	$250.9	$274.2
Inventory Control	355.1	376.2	411.2
Procurement Operations	120.7	139.6	152.8
Depot Maintenance	2,026.9	2,223.9	2,920.2
Modernization	305.5	445.4	465.8
Industrial and Stock Fund Support	52.8	-286.4	-26.6
Transportation	476.6	585.9	617.6
Miscellaneous Logistic Support Activities	148.5	229.3	247.0
Printing/Publications Activities	43.6	47.1	50.1
Test Ranges	180.8	203.4	214.4
Commissary Operations	159.6	163.0	165.6
Command	68.7	58.2	61.0
Telecomm & Command Control	21.2	24.2	26.0
Base Operations	482.6	430.4	455.2
Total*	$4,689.4	$4,891.2	$6,034.5

* May not add due to rounding.

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The increases in funding requirements in FY 1983 include price growth of $490 million and an increase of $350 million (no outlay impact) required to implement the new policy of awarding depot maintenance contracts outside the Industrial Fund. Depot maintenance program growth amounts to $229 million, which is principally for additional component repair related to increases in the flying hour program and to the use of more sophisticated equipment. Other Program VII increases include $22 million for additional transporation requirements, $9 million for workers disability compensation, $9 million for service engineering and technical data updates, and $7 million for interim contractor support (B-52 Offensive Avionics System; A-10 Inertial Navigational System; and EF-111A).

TRAINING, MEDICAL & OTHER GENERAL PERSONNEL ACTIVITIES

This program provides for training, medical care and other activities for personnel as individuals rather than as members of organizations. The O&M funds are used to provide individual training for military and civilian members of the active Air Force, Air Force Reserve, Air National Guard, Air Force Academy and AFROTC cadets. This program also includes recruiting activities, military personnel off-duty education programs, and civilian education and development programs. The medical portion provides essential medical capability to meet wartime and peacetime requirements; and provides health care for active duty personnel, and to retired personnel and other authorized recipients on a space available basis. The funding requirements are summarized in the following table:

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	($ Millions)		
	FY 1981	FY 1982	FY 1983
Recruiting & Examining	$44.9	$47.4	$51.3
Recruit & Specialized Training	124.7	168.8	197.2
Officer Acquisition	45.1	55.5	66.2
Flight Training	248.2	338.6	342.5
Professional Development Education	30.3	34.8	44.3
Education and Training -Health Care	23.2	26.6	28.8
Other Personnel Activities	72.0	85.8	96.8
Training Support Activities	44.8	51.5	57.6
Telecomm & Command Control - Training	15.5	18.3	19.6
Base Operations - Training	388.7	394.5	452.8
Hospital Operations	384.3	413.1	475.8
Care in Non-Air Force Facilities	33.5	31.9	33.8
Telecomm & Command Control - Medical	3.5	3.9	4.8
Base Operations - Medical	88.9	92.6	106.6
Total*	$1,547.7	$1,763.2	$1,978.1

* May not add due to rounding.

The increases in training funding requirements in FY 1983 include increases for Undergraduate Flight Production rates, the increased TDY-to-School program supporting skill progression training, Type I factory training required to support the large number and complexity of new weapon systems entering the

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inventory, increased Survival Training necessitated by the expanded Undergraduate Flight Training, increased Intelligence Training to support modernized intelligence systems, additional AFROTC scholarships, expanded professional development education programs, expanded training development program to implement new instructional technologies, and increased enlisted accessions.

The increases in medical funding requirements in FY 1983 include contract services for general and orthopedic surgeons; replacement of medical supply bench stock; occupational environmental health laboratory services; environmental survey studies to identify hazardous material sites; medical support for new weapon systems beddown and War Reserve Materiel (WRM) storage facilities support; site preparation for uniform chart of accounts computers; and medical supply requirements associated with increased beneficiary strengths.

ADMINISTRATION AND ASSOCIATED ACTIVITIES

This program covers administrative support of departmental and major administrative headquarters, field commands and associated activities. This program also provides the Air Force and DoD agencies with essential photographic and video services. Resources are included for the Civil Air Patrol, Air Force Audit Agency, Air Force Service Information and News Center, Air Force Accounting and Finance Center, Aerospace Audiovisual Service, Air Force Inspection and Safety Center, and Air Force Manpower and Personnel Center. Funding is also provided for service-wide support in specialized areas. The following table summarizes the funding requirements:

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	($ Millions)		
	FY 1981	FY 1982	FY 1983
Departmental HQ's	$63.3	$71.8	$75.9
Service-Wide Support	222.3	193.9	230.9
Personnel Activities	33.0	39.2	42.4
Other Support Activities	12.5	11.1	10.5
Telecomm & Command Control	5.7	7.4	7.7
base Operations	17.2	18.4	21.1
Total*	$354.0	$341.9	$388.5

* May not add due to rounding.

The increases in funding requirements in FY 1983 include price growth ($+19.1 million), ADP support ($+12.9 million), and initiation of a productivity investment program ($+7.6 million).

SUPPORT OF OTHER NATIONS

This program provides funding for support of Air Force personnel assigned to the North Atlantic Treaty Organization (NATO), Supreme Headquarters Allied Powers Europe (SHAPE), other joint military headquarters and agencies, NATO airborne early warning and control (AEW&C) activity, and miscellaneous support to non-security assistance activities. Funding requested is shown below:

	($ Millions)		
	FY 1981	FY 1982	FY 1983
Support of Other Nations	$4.9	$8.1	$6.8

The major changes in funding requirements in FY 1983 include price growth ($+.7 million) offset by FY 82 one-time costs for NATO AEW&C beddown activities in Europe ($-1.9 million).

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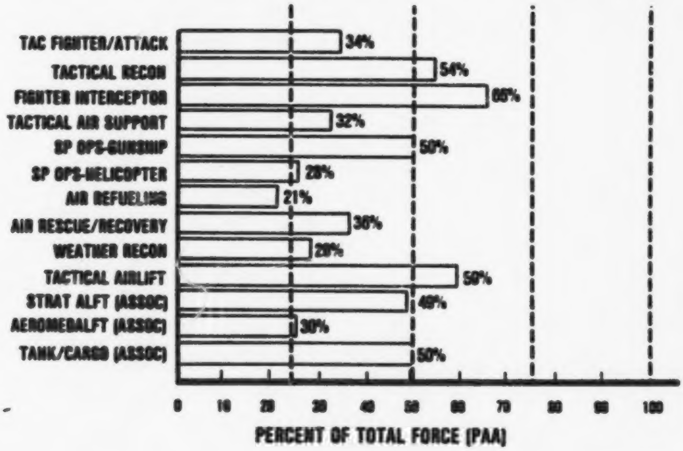
AIR RESERVE FORCES

Pursuant to the total force policy, the Air Force has placed increasing reliance on the significant contribution of the Air Force Reserve and Air National Guard to its overall combat and support capabilities. As illustrated in the following chart, the Air Reserve Forces make up over half of the Air Force's tactical reconnaissance, fighter interceptor and tactical airlift capability. Air Reserve associate units make up almost half of the Air Force's strategic airlift and tanker/cargo airlift capability. The contribution across-the-board is substantial.



AIR RESERVE FORCES
CONTRIBUTION TO TOTAL FORCE
FY 1983

The following pages contain further data and the budget requests for the Air Force Reserve and the Air National Guard.

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OPERATION AND MAINTENANCE, AIR FORCE RESERVE

The mission of the Air Force Reserve is to develop and maintain operationally ready combat units, mission support units and individuals that are available for active duty in time of war, national emergency, or other threats to our national security. To accomplish this mission, the Air Force Reserve conducts a comprehensive program of recruitment, training, and operations. The force structure consists of 35 equipped flying units, 18 nonequipped associate units (flying C-141, C-9 and C-5 aircraft assigned to the Military Airlift Command), one non-equipped KC-10A associate tanker unit assigned to the Strategic Air Command, and 137 mission support units.

Operation and Maintenance funding provides for the day-to-day operating expenses of Reserve bases and units, including pay of civilian personnel, aviation and ground fuels, depot maintenance, supplies, and other expenses required to carry out the Reserve mission.

The following table shows O&M, Air Force Reserve funding for FY 1981-83:

	($ Millions)		
Budget Activity	FY 1981	FY 1982	FY 1983
Mission Forces	$422.4	$479.2	$543.3
Depot Maintenance	70.3	80.0	101.4
Other Support	106.4	110.5	121.6
Total	$599.1	$669.7	$766.3

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The increases in funding requirements in FY 1983 include price growth of ($+18.7 million). Program increases are the result of a full year's operation of aircraft conversions that occurred in FY 1982 plus four additional conversions in FY 1983. These include F-4 Tactical Fighter units ($+25.6 million), A-10 Tactical Fighter units ($+13.7 million) and C-130 Tactical Airlift units ($+11.8 million). Mission increases to enhance readiness and wartime capability occur in C-141 and C-5 Strategic Airlift units ($+14.0 million), KC-10 program ($5.6 million), Civil Engineer, Aerial Port and Aeromedical Evacuation units ($3.2 million). Depot maintenance program growth ($18.3 million) is related to these conversions which result in more modern, sophisticated aircraft. These increases have been partially offset by decreases in units affected by the conversions ($-20.8 million). The following table shows manpower data for FY 1982-83:

	(End Strength)		
	FY 1981	FY 1982	FY 1983
Military	61,565	63,736	66,600
Civilian	11,107	11,822	12,290

The major changes between FY 1982 and FY 1983 are the result of the full year impact of aircraft conversions occurring in FY 1982 plus four additional conversions in FY 1983. Increased mission requirements in Civil Engineer, Aerial Port and Medical Units also contribute to manpower changes.

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AIR FORCE RESERVE FLYING UNITS

	FY 1981	FY 1982	FY 1983
FLYING SQUADRONS			
KC-135	3	3	3
C-130	12	13	14
C-123	3	1	-
C-7	2	2	1
WC-130	1	1	1
HH-1/UH-1	1	1	1
HC-130	1	1	1
HH-3/AC-130	2	2	2
CH-3	1	1	1
AC-130	1	1	1
F-105	2	1	1
A-37	1	0	-
F-4	3	5	5
A-10	2	3	4
ASSOCIATE SQUADRONS			
C-141	13	13	13
C-5	4	4	4
C-9	1	1	1
KC-10	0	1	1
TOTAL	54	54	54

The following chart shows that the Air Force Reserve civilian end strength has remained relatively level over the past six years.

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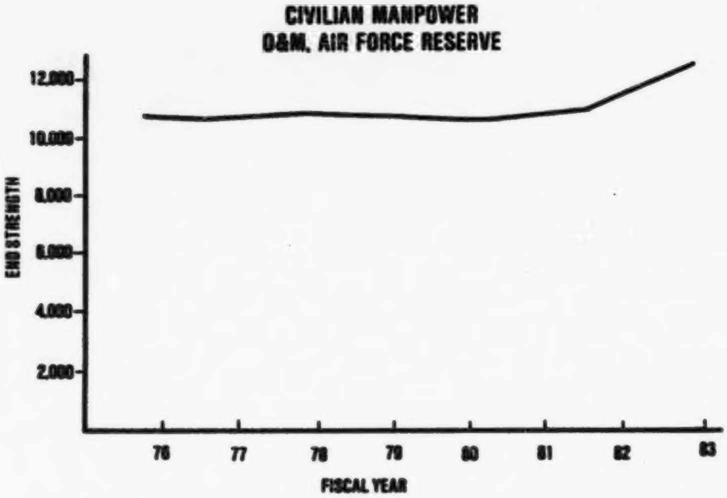
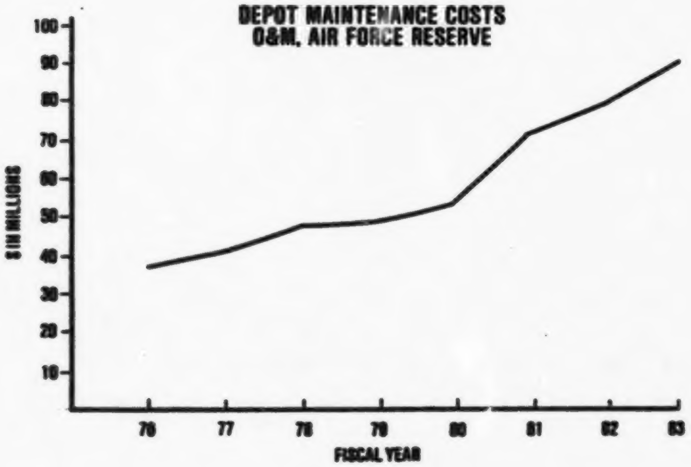
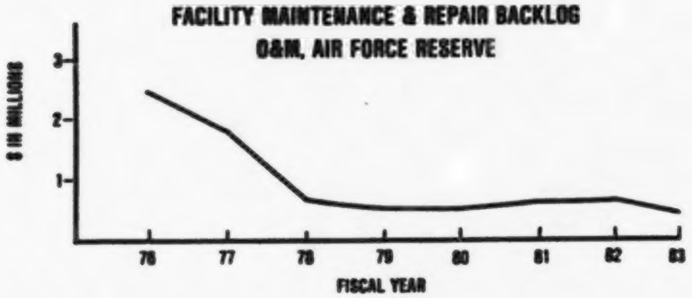

CIVILIAN MANPOWER
O&M, AIR FORCE RESERVE

Depot maintenance costs have grown steadily since FY 1976 because of inflation, the increasing number and sophistication of aircraft, and the increasing average aircraft age.


DEPOT MAINTENANCE COSTS
O&M, AIR FORCE RESERVE

The backlog of facility repair and maintenance has been reduced since FY 1976, as shown in the following chart.


FACILITY MAINTENANCE & REPAIR BACKLOG
O&M, AIR FORCE RESERVE

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OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

The Air National Guard (ANG) is programmed to have 91 flying units and 244 independent nonflying units in FY 1983. Although no new flying units will be formed, seven existing units will experience changes. One F-105 Tactical fighter unit will convert to the F-4D; one O-2 unit will convert to the F-4C; one RF-4 unit will convert to the F-4D; and one A-7D unit will convert to the F-16. In addition, one RF-4C unit will increase its Primary Aircraft Authorization (PAA) from 18 to 24, one A-7D unit will increase from 18 to 24 PAA, and one F-4D unit is programmed to increase from 36 to 40 PAA.

Operation and Maintenance funding provides for the day-to-day operating expenses of ANG units, including pay of civilians, aviation and ground fuel, depot maintenance of assigned aircraft, supplies, and other expenses.

The following table shows the O&M, Air National Guard funding data for FY 1981-83.

($ Millions)

Budget Activity	FY 1981	FY 1982	FY 1983
Operation of Aircraft	$493.1	$531.8	$530.6
Logistical Support	207.7	241.0	289.6
Training Support	814.8	871.5	937.9
Service-wide Support	3.0	3.5	3.7
Total	$1,518.6	$1,647.8	$1,761.8

The Air National Guard Operation and Maintenance appropriation features a $114 million increase, or 6.9 percent

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above the FY 1982 level. Three percent of this growth is price related ($49.6 million), while the remaining 3.9 percent represents program growth ($64.4 million).

Aircraft Operations. The $1.2 million decrease is comprised of an $18.5 million decline in fuel costs due to revised standard fuel prices offset by a $17.3 million increase in program growth. The program growth is tied to the annualization of FY 1982 force changes and those occuring in FY 1983.

Logistical Support. This program finances Air National Guard Depot Maintenance requirements and is $48.6 million above the FY 1982 level. Program growth is $32.7 million while price growth is $15.9 million. Depot Maintenance program growth stems from the increased scope and type of aircraft due Programmed Depot Maintenance (principally the F-4), increased ground communications equipment overhauls, and increased funding for exchangeables caused by increased flying hours and mix of weapon systems.

Training Support. This program finances ANG base operations and maintenance activities. The $66.4 million increase for FY 1983 consists of $52.0 million in price growth and $14.4 million in program growth. Programmatic changes between FY 1982 and FY 1983 include: annualization of civilian workyear costs, communications and equipment costs for the Phase IV ADP program, mobility equipment and supply requirements for combat control,

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tactical control, and RDF units; increased exercise participation; and new base operating support responsibilties for Duluth, Minnesota, Hancock Field, New York, and Kingsley Field, Oregon.

The following table shows manpower data for FY 1981-83.

(End strengths)

	FY 1981	FY 1982	FY 1983
Military	98,293	100,100	101,781
Civilian	23,753	23,553	23,042

The increase in military end strength between FY 1982 and FY 1983 is driven principally by increased requirements for full-time military direct unit support, USAF mission support, and training. The major factor contributing to the decrease in civilian end strength is the conversion of Air National Guard technicians to full-time military status.

The fluctuation in Air National Guard civilian end strength from FY 1977 to FY 1983 shown in the next chart is primarily the result of two counteracting factors: increased requirements associated with aircraft conversions (e.g., phaseout the F-100 aircraft and phase in of F-4 aircraft) and the replacement of some civilian air technicians with full-time military personnel (beginning FY 1979).

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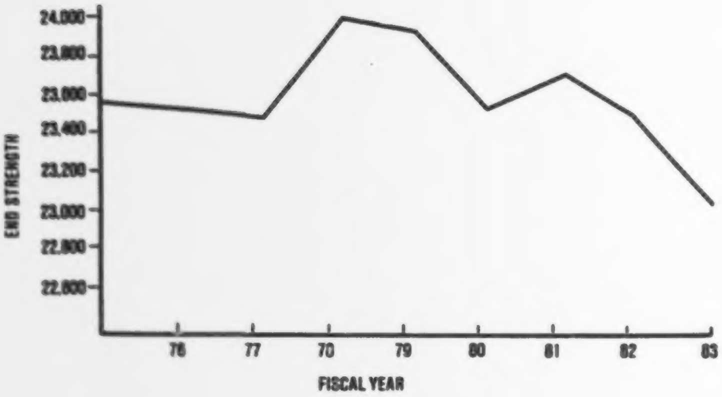
CIVILIAN PERSONNEL
O&M, AIR NATIONAL GUARD



AIR NATIONAL GUARD FLYING UNITS

FLYING UNITS	FISCAL YEAR 81	FISCAL YEAR 82	FISCAL YEAR 83
A-7	14	15	14
A-10	4	5	5
C-130	19	19	19
EB-57	1	-	-
EC-130	1	1	1
F-4	14	17	20
F-101	2	-	-
F-105	2	1	-
F-106	5	5	5
HC-130	2	2	2
KC-135	13	13	13
O-2	2	2	1
OA-37	4	3	3
RF-4	8	8	7
Total Flying Units	91	91	91

Depot maintenance costs have increased for the Air National Guard because of inflation and increasing sophistication/complexity of aircraft. Growth since FY 1976 is shown in the following chart.

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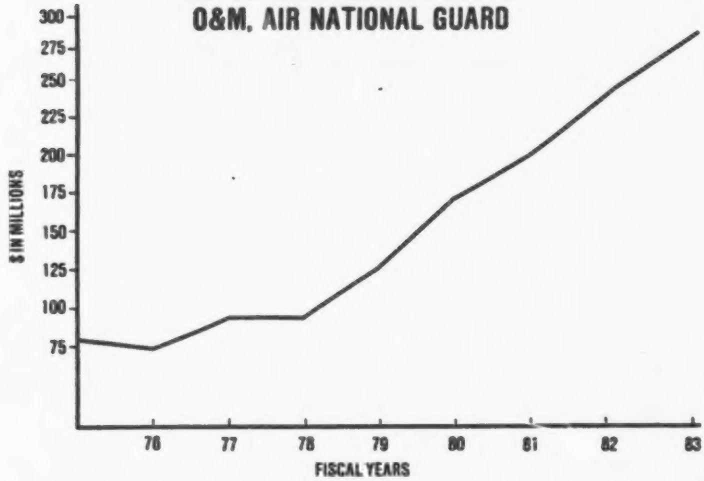
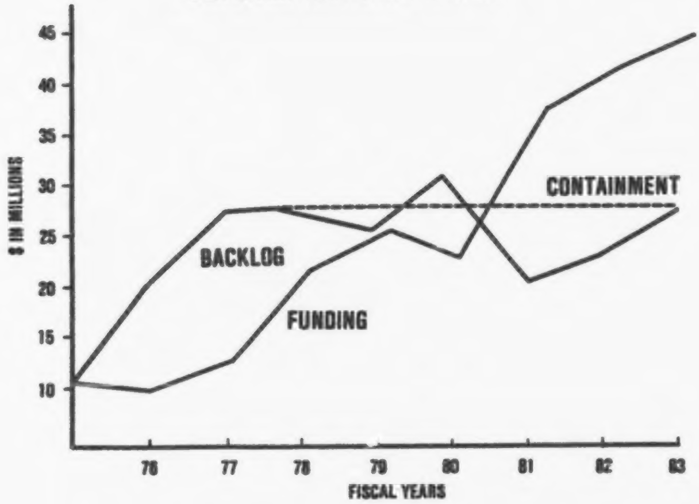
DEPOT MAINTENANCE COSTS
O&M, AIR NATIONAL GUARD



The following chart shows the backlog of facility repair and maintenance since FY 1975. The "containment" line indicates the backlog level desired. The growth in the backlog level since FY 1981 is due to the acquisition of Rickenbacker ANGB, Ohio, Otis ANGB, Massachusetts, and Kingsley Field, Oregon from the active Air Force.

FACILITY MAINTENANCE & REPAIR BACKLOG
O&M, AIR NATIONAL GUARD



	76	77	78	79	80	81	82	83
▬▬ FUNDING	9.9	11.5	21.6	24.8	22.6	35.6	38.6	42.9
▬ ▬ ▬ BACKLOG	20.0	26.7	28.3	26.2	29.8	22.0	24.0	27.6

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CONCLUSION

This concludes my overview of the FY 1983 Air Force O&M budget requests. In summary, the FY 1983 O&M, AF budget request is a carefully developed, austere estimate of the resources needed to support a balanced program of aircraft, flying hours, manpower levels, and base structure, thereby operating and maintaining a modern, well-trained and combat-ready force.

Thank you for your interest and support.

Senator **Humphrey**. The subcommittee is adjourned.

General **Geran**. Thank you very much, sir.

[Whereupon, at 10:55 a.m., the subcommittee adjourned, to reconvene subject to the call of the Chair.]

BEST DOCUMENT AVAILABLE

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

FRIDAY, MARCH 5, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

NAVY AND MARINE CORPS OPERATIONAL READINESS

The subcommittee met, in open session, pursuant to notice, at 2:00 p.m., in room 224, Russell Senate Office Building, Senator Gordon Humphrey (chairman) presiding.

Present: Senators Humphrey and Levin.

Staff present: Anthony J. Principi, counsel; Paul C. Besozzi, minority counsel; Michael B. Donley, professional staff member; Carol J. Rudolph, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater.

OPENING STATEMENT BY SENATOR GORDON HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good afternoon.

The subcommittee meets today to receive testimony concerning the operational readiness of major Navy and Marine Corps commands. We are pleased to have with us Adm. Harry Train, Commander in Chief, Atlantic Fleet; Adm. James Watkins, Commander in Chief, Pacific Fleet; Lt. Gen. John Davis, Commanding General, Fleet Marine Force, Pacific; and Lt. Gen. A. G. Schwenk, Commanding General, Fleet Marine Force, Atlantic.

The subcommittee's primary interest in today's hearing is a broad assessment of the personnel and material readiness factors which are affecting the Navy's ability to execute its mission against a growing threat.

In addition, we seek to understand the commanders' view of the proper balance of resources that should be applied near-term readiness and longer-term growth in force structure.

The subcommittee is also interested in the peculiar problems associated with distant and long deployments, tenuous lines of supply, and the adequacy of shore support.

Finally, we seek your assessment of the pace and direction of readiness and sustainability trends, as we gage the level of effort and the priorities reflected in the President's budget.

Admiral Train, will you lead off? You are free to proceed as you wish.

STATEMENT OF ADM. HARRY TRAIN, COMMANDER IN CHIEF, ATLANTIC FLEET

Admiral **Train**. Thank you, Mr. Chairman.

In preparing for this session, I have submitted a very detailed and complete formal statement, both classified and unclassified, that focuses on the questions that you have raised and treats them in considerable detail.

With your permission, this afternoon, I would like to just summarize that statement briefly, and then at any point later in the session that you would like me to develop further or in more detail those items contained in my statement, I will be delighted to do so.

Senator **Humphrey**. Fine.

Admiral **Train**. Mr. Chairman, in assessing my capabilities, I will focus on personnel, readiness, and sustainability. Before I do that, I would like to refresh the committee's memory on the missions that are assigned me as commander in chief of the fleet. Those are essentially that of deterring war and of defending the vital interests of the United States in peacetime. If deterrence fails in the Atlantic, I am expected to do four basic things.

Those four things are as follows. First, I must establish a sea bridge between North America and Europe over which the reinforcement and resupply of material will flow that sustains combat operations on the part of U.S. and allied forces in Europe.

Second, I am expected to establish the cork in the bottle, if you will, in the Greenland, Iceland, United Kingdom gap that will prevent the Soviet northern fleet from exiting its bases in the Kola Peninsula and entering the maritime battleground of the North Atlantic.

Third, I am expected to establish a sea bridge running the entire length of the South Atlantic from the vicinity of Capetown, South Africa, to the east coast of the United States, including the Caribbean and the ports in the Gulf of Mexico, over which will flow the dominant percentage of the energy requirements for the United States and most of the raw materials that are so essential for our industrial process and for the workings of our industrial machinery during war.

Fourth, I am expected to support my adjacent unified commanders in the Pacific and in Europe. I will develop that a little further in a few minutes as I talk about my capabilities vis-a-vis my responsibilities.

I am essentially working with four regions, three that are directly under my control and over which I have direct accountability, and a fourth region that I support in the context of supporting adjacent commanders. Those four regions are the North Atlantic, the Caribbean Basin, the South Atlantic, and then my support to our maritime operations in the Mediterranean and the Indian Ocean.

SOVIET NAVAL THREAT

The primary threat to my ability to carry out my missions both in peacetime and in war is obviously the Soviet Navy. A secondary but related threat is the warmaking capability and the political activity of Cuba.

The Soviet Navy today has developed into a capable Navy, capable of global operations in a very professional way. The Soviet naval construction programs, which I have described in detail in my formal statement, have been considerable. They have resulted in the Soviet Navy putting to sea ships such as the 28,000-ton *Kirov* nuclear-powered cruiser, one of the most capable warships that we have seen since the end of World War II. They have also recently commissioned two classes of destroyers that have very capable weapons systems and appear to us to be ships capable of operating at great distances from the Soviet Union and acquitting themselves well in combat and functioning very well in peacetime as presence forces or as event influencers.

The Soviet Navy, like the U.S. Navy is used as a tool of diplomacy by the political leadership of the Soviet Union.

Going back to my wartime missions which I described earlier, I would like to give you a very brief assessment of how I stand in my ability to carry out those missions. I will treat first the reinforcement-resupply mission, that is the sea bridge across the North Atlantic.

With the full cooperation of the NATO navies, I think that today in a NATO-Warsaw Pact war we probably have an even chance of carrying out our mission of establishing and maintaining that level of reinforcement and resupply of our forces in Europe that will sustain a war.

In prior years, as you know, we have been able to tell you that we enjoyed a slim margin of maritime superiority. Today, as we reported to you last year, that issue is somewhat in doubt, and will depend upon many imponderables. We believe that in carrying out our mission of reinforcing and resupplying Europe, that the task of confining the Soviet Navy north of the GIUK gap and as far north in the Norwegian Sea as possible is key to our mission to successfully reinforce and resupply Europe.

Much will depend on where hostilities commence in determining whether or not we will be successful in executing the strategy of confining the Soviet Navy to their northern bases. If hostilities commence in the Middle East, for example, a not unlikely situation, and we have moved our forces into the Middle East and into the eastern Mediterranean, we will find ourselves with forces malpositioned to embark upon a successful campaign in the North Atlantic. If instead the hostilities commence in the North Atlantic, we will be in a much more comfortable posture.

In assessing the relative merits of our forces in sustaining the sea bridge, it appears to me that the most reliable portion of that sea bridge is that portion in the middle. In our ability to get merchant ships containing reinforcement-resupply material across the Atlantic in the face of submarine opposition, the weakest portions of that sea bridge, in my view, are on both ends. We have a weak link in our ability to break out of the Caribbean past the choke points between Cuba and the United States and Cuba and Mexico.

We also have a weak link in Europe consisting of minable ports that represent the destination ports for a majority of our reinforcement-resupply materials. We have relatively low confidence that those ports will be mine free and free from air attack when our ships arrive.

CARIBBEAN AREA

The second area that I will discuss is the Caribbean. I alluded to that a moment ago. The Caribbean is indeed a weak link in our reinforcement-resupply bridge, and a chain is no stronger than the weakest link. Today, Cuba has in their possession sufficient force to interdict for a time our shipping that passes through the choke points out of the Gulf of Mexico into the North Atlantic.

Now, we can perhaps take some comfort in the fact that Cuba might find it suicidal to embark upon such an effort. But we in the military, particularly those of us in positions of leadership in the military, cannot indulge in the luxury of assessing an adversary's intentions. We must look at his capabilities, and as long as Cuba has the capability to interdict, we will have to withhold forces that are committed against NATO as a hedge against the possibility of our having to fight in that area.

As you know, 60 to 70 percent of all the oil that is imported into the United States comes through the Caribbean in one way or another. That represents 30 percent of the entire oil consumption of the United States. It is essential not only that we be able to reinforce and resupply Europe from the Caribbean, but also that we are able to continue to import raw materials and energy through that very important maritime line of communication.

The significance of the Caribbean is that we have no forces programed for, or committed to, and action in the Caribbean. All of our forces are committed to other areas such as the North Atlantic, the Mediterranean, the Indian Ocean, or the Western Pacific. So, any force that we apply to hedging against Cuban adventurism in the Caribbean are forces that we subtract from other areas of the world.

SOUTH ATLANTIC AREA

Similarly, in the South Atlantic, the third area that I will talk about in detail today, we have no forces programed nor committed to sustaining that vital line of communications. It is entirely possible that over the course of the next 10 years, we will see the establishment in the South Atlantic of a fifth Soviet Fleet. I personally believe this is a possibility, because I think they are running out of sea room in which they can deploy and employ their ballistic missile submarines, and it seems quite logical that they would turn to the South Atlantic to find more sea room in which to hide their sea-based strategic deterrent.

If they do this, they will support it with surface forces, and it is not unlikely that we will see some assembly of Soviet surface forces, submarines, land-based air and ballistic missile submarines in the vicinity of Western Africa, the Gulf of Guinea, Luanda, Angola, Conakry, Guinea, or some other place that they have conditioned to this possibility in the past. If they do that, we will have to divert forces to removing that threat to our ability to use the South Atlantic lines of communication.

The South Atlantic is extremely important, as I mentioned earlier. Much of our energy supplies come through the South Atlantic. We get a considerable portion of our petroleum products from Nigeria. We get a large percentage of our petroleum products from the oil-bearing regions of the Middle East. We get essential raw materials such as chromium, for example and 90 percent of all the chromium that the United States uses comes from the southern portion of Africa, Zimbabwe and South Africa.

You might not be aware of this, but each jet engine that the United States puts together or builds uses 1,500 pounds of chromium. It is a very strategic mineral, and it is one among many.

The fourth area that I mentioned was support of adjacent commanders. The significance of the support of adjacent commanders to me is that it could cause me to have my forces maldeployed at the start of hostilities. It could also present a problem in terms of support of the war effort elsewhere. I might not be able to provide forces to Admiral Watkins, for example, or to General Rogers in the European theater. But the concept of support to adjacent commanders is the thing that assures that all of us can make our limited assets work to carry out those tasks that our political leaders have assigned us. Whether we have equivalent forces at the time or not, we can look to some adjacent commander to help us out.

Overall, the maritime balance, as I indicated, is sort of a toss-up, a gray area that is very difficult to predict. Much will depend on how many mistakes each side makes. We can only hope that we can carry out the fine maritime traditions of the U.S. Navy by making fewer mistakes than our potential adversaries.

PEACETIME OPERATIONS

One of the capabilities that I wish to discuss with you today is that of peacetime operational tempo. We find ourselves in a situation today where operational tempo is taking a great toll on our forces and the people who man those forces. We have fewer ships today than we did at the height of the Vietnam war, but we have essentially the same number of requirements that were levied upon us at that time.

To give you some specific numbers, in 1968, at the height of the Vietnam war, each deployable ship in the U.S. Navy averaged 75 days a year deployed away from its home waters. Today, with no war in progress, each deployable ship of the U.S. Navy averages 100 days per year deployed away from home waters. The significance of this is that we have less management control over the activities of our ships when they are home than we would like to have.

We deploy ships for long periods of time, and when they get home, we have to maintain them, look out for the interests of the crew, and do all of those other things that you must do to a ship. But now, we must cram them into a smaller period of time.

The essential capability upon which we depend to carry the day in the event of a maritime war are our aircraft carriers or sea-based tactical air. That is the balancer, the equalizer that makes up for the great disparity in numbers between the U.S. Navy and the Soviet Navy or between the U.S. Atlantic Fleet and the Soviet Northern Fleet and Western Fleets. The equalizer is the aircraft carrier, and the fact that we do have sea-based tactical air.

We have carriers in inadequate numbers to do all of the things that our political leaders ask of us. We see in the battleship reactivation program the ability to stretch our application of aircraft carriers to the task that our political leaders demand. So the battleship is in effect a force multiplier, a force multiplier that enables us to use our aircraft carriers more effectively in support of our political leaders, and in support of political decisions.

BATTLESHIP REACTIVATION

Battleship reactivation is a very important program which I can develop further for you in the course of the question and answer period, if you wish. I am personally very, very much in favor of not only the acquisition of the new CVN's that are in the fiscal year 1983 budget, but also the battleships that have been incorporated since last year's budget.

The Aegis program remains one of the most important programs to help us cope with a deficiency that we are facing today. That deficiency is limited to fleet air defense capability. Limited because the threats that we are facing are outstripping the weapons systems with which we must face the air threat to our task forces at sea.

The DDGX program which is getting its initial funding in fiscal year 1985 is another important program that will assure that we will not bottom out on the numbers of major fleet escorts that are available to work with our carriers and support our other task forces in the event of war.

AMPHIBIOUS LIFT

Amphibious lift is important. The programs that you see in the fiscal year 1983 budget will help us get a start in improving our effort in achieving the amphibious lift objective that the President has established which is to be able to lift one Marine amphibious force plus one Marine amphibious brigade. The program that is contained in the administration's budget is one that will achieve that, and one that I enthusiastically support.

The increased O. & M.N. funding that is contained in this year's budget is very welcome. The increased O. & M.N. budget that was contained in last year's budget is beginning to take effect.

PERSONNEL READINESS

I am happy to be able to tell you that personnel readiness is up. But we still lack trained technical personnel, and the solution to the problem will take time. The pay and compensation measures taken by the Congress in the past 2 years have been quite helpful in helping us arrest the hemorrhage of trained and experienced men from the Navy. We think we are seeing the first concrete indicators that we are going to be able to regain that level of manning that we require for our 600-ship Navy or 15-battle group Navy. It will take time, however.

SHORT WAR THEORY

There is one other thing I would like to bring up and highlight at this point, and perhaps discuss later in the question period. That is the propensity on the part of some of our political leaders, some of the distributors of public funds, to embrace a concept which I call the short war theory to solve our problems. Like Secretary Weinberger, I would like to highlight for you the danger of embracing a short war theory as a solution to our current problems of inadequate assets.

As I see it, if you become completely committed to a short war, to the point where you cannot fight a sustained war, you find yourself in a position where there are only four options available to you as the fighting nears the end of your planned program of a short war.

The first possible outcome is that the enemy or our adversary can capitulate. This is very unlikely. Second, that we capitulate, which is unthinkable. Third, that we resort to the use of nuclear weapons because we have no other course of action. That would be catastrophic. And fourth, that we continue fighting with conventional means. It is this last possible outcome which is the only satisfactory outcome, because it allows us the ability to involve and engage in negotiation.

So, I urge you as you go about the very important task of assessing how to allocate the very limited assets of the Nation to a war fighting capability that you not become enamored with the easy solution of the short war. The short war is only an illusion. It is not a real fix to our problem.

In summary, the Atlantic Fleet, we have inadequate assets to simultaneously carry out all the missions that are assigned, not only in war but in peacetime. The wartime missions that we will have to go about sequentially instead of simultaneously are the rapid reinforcement of Europe, the defense of our sea lines of communication, the defense of the islands, such as Iceland and the Azores, and the maritime reinforcement of other areas of the world.

The programs proposed in the budget for naval construction and procurement are good, but I will remind you, sir, that history has not been kind to us in achieving the outyear projections that are contained in our 5-year defense program. In my judgment, a 15-carrier battle group Navy is essential to achieve the minimum essential capability that our political leaders require to defend the vital interests of the United States in peacetime and in war. Our readiness today is adversely affected by prior budget constraints, by earlier personnel losses, but the trends have been reversed and are positive. The excellent compensation legislation that the Congress has passed over the last 2 years appears to have achieved its objective.

I would like to end on a positive note, Mr. Chairman, and emphasize for you that the United States has several things going for it, not the least of which is a maritime heritage and a tradition of winning wars at sea, a tradition not shared by our most likely adversary. The administration's determination and the sense of the Congress amendment that was passed last year as a part of the fiscal year 1982 budget gives us in positions of military leadership confidence that we will be able to achieve our objectives. As the CNO said the other day, the Navy is a navy on the move. We have momentum, and that is in the right direction.

Thank you, Mr. Chairman.

[The prepared statement of Admiral Train follows:]

PREPARED STATEMENT BY ADM. HARRY D. TRAIN II, COMMANDER IN CHIEF, U.S. ATLANTIC FLEET

Mr. Chairman, the past year has been an eventful one for the United States—particularly for those of us in the armed services. I welcome this opportunity to address the Preparedness Subcommittee once again—and to give you my assessment of how well the Atlantic Fleet is prepared to carry out its assigned missions and tasks.

In assessing my capability to support national policy, I will focus primarily on personnel, readiness, and sustainability. I will also relate some of our more critical requirements—and the risks associated with our current ability to wage and sustain a successful conflict.

INTRODUCTION

The primary mission of the Atlantic Fleet is deterrence. We must clearly convey to the Soviets, as well as to our allies, that we have both the capability and the will to prevail in any naval engagement under any circumstances. Should deterrence fail, the Atlantic Fleet must be trained and ready to fight a war in the Atlantic—sustain the fight—and terminate the conflict in a way which best supports our political objectives.

Deterrence is achieved through the maintenance of superior military forces and a clear recognition by all concerned that our national will and resolve support the employment of these forces if the need arises. International cooperation contributes to deterrence through mutual security relationships—which provide for the security of U.S. and Allied interests throughout the Atlantic community—and help insure continued free access to our collective world markets and resources.

In his testimony last month to the House Armed Services Committee, Admiral Hayward pointed out that our Nation continues to rely heavily upon the use of naval forces as an instrument of national policy. This role continues to expand and the associated commitments continue to increase.

During peacetime, Atlantic Fleet operations help preserve a favorable balance of political and military influence in the Atlantic area. These operations include various bilateral and multinational exercises—such as "Unitas" and "Ocean Venture 81"—and participation in major NATO naval exercises—such as the standing naval force Atlantic and "Northern Wedding." This activity provides a high level of visibility for U.S. Forces and increased naval presence in key areas—such as the North Atlantic, the Caribbean, and around South America.

In order to put Atlantic maritime strategy in proper perspective, I will review the Soviet naval threat—and then provide an assessment of our ability to support national security objectives in the four primary regions for which I am responsible:

The Atlantic theater north of the Tropic of Cancer—the NATO agreed area—including the critical northern flank:

The Caribbean Basin—including Central America and the Caribbean Islands;

The Atlantic theater south of the Tropic of Cancer—an area which is of increasingly vital importance to U.S. interests and which has been neglected until recently by many planners and strategists; and

The other regions to which the Atlantic Fleet must provide forces—the Mediterranean Sea and the Indian Ocean.

This regional assessment will provide the foundation for a more thorough appreciation of the overall strategy for employment of naval forces throughout the Atlantic. I will include the impact of Allied contributions as appropriate.

THE SOVIET NAVAL THREAT

The ideas and principles which Alfred Thayer Mahan articulated so well nearly 100 years ago have not been lost on the Soviets. Over the past 20 years they have built their navy from a coastal defense force to a blue-water fleet—now capable of supporting global operations. They keep large, well-equipped naval task forces forward deployed in the Indian Ocean and Mediterranean—just as we do.

The Soviet Navy has achieved a "balanced force" consisting of various types of submarines, surface ships, aircraft, and support units. Their strategic forces and tactical support groups can carry out the missions with which the navy is charged—independently, or in concert with forces of other branches of the Soviet military. More importantly, the Soviet Navy is fast approaching a flexible defense indepth capability—they are able to wage war with long range, accurate, submerged-launched strategic weapons, from home waters—where its strategic units are more secure.

The Soviet naval construction program continues unabated. Their ships and aircraft are new and capable—and they outnumber us. In surface construction, there are a total of two *Kiev* class VSTOL aircraft carriers and numerous cruisers/destroyers in various stages of construction and sea trials. In addition to the 28,000 ton nuclear-powered cruiser *Kirov* which became operational last year, the Soviets have launched two new classes of 8,000 ton combatants. The *Sovremennyy*—which resembles our DDG-993 *Kidd* class guided missile destroyer in capability—and the *Udaloy*—which resembles our *Spruance* class ASW escort. In the Baltic, *Sovremennyy* class surface warfare/gunfire support ships and *Udaloy* class ASW destroyers are in series construction—with one additional *Udaloy* on sea trials. The lead units of each class have already joined the operational fleet. Additionally, a second *Kirov* CGN is under construction.

The third *Kiev* class carrier is currently conducting sea trials in the Black Sea. A fourth unit is under construction. The *Kirov*—and the new *Oscar* class cruise-missile-firing submarine—will carry the SS-N-19 anti-ship missile.

Evidence continues to point to Soviet construction of a nuclear-powered, angled-deck aircraft carrier. Open source publications have reported Soviet intentions to construct large-deck aircraft carriers, following completion of the *Kiev* construction program. Extensive capital improvements and upgrading of construction capabilities have taken place at the Nikolayev shipyard in the Black Sea—the same shipyard used for construction of the four *Kiev* units. It is clear that while we debate the vulnerability and value of large-deck carriers, the Soviets are planning to build them.

The rate of Soviet submarine construction continues at a pace in excess of eight per year—13 were built in 1980—as compared to our two to three per year. The 25,000 ton ballistic-missile-firing *Typhoon* class submarine continues toward operational status. The Soviets have ample surface ships, aircraft, and submarines to support large-scale mining efforts. They practice mine warfare regularly and write about it frequently in their professional journals.

It is clear that the Soviets have learned to use their navy as a tool of diplomacy to influence events anywhere in the world. It is equally clear that they have determined to challenge our ability to do the same.

THE NORTH ATLANTIC

Melvin Laird, when he was Secretary of Defense, once observed that NATO is an alliance strung together by ships. The "Atlanticity" of NATO is that feature which gives the alliance its essential character. The Founding Fathers of NATO recognized that the economic and military support provided by North America to its European Allies across the Atlantic was the principal ingredient of victory in World War II. Reinforcement and resupply in wartime and economic trade in peacetime are still today the essence of the NATO alliance. The inclusion in NATO of the United States and Canada—whose territory is not directly threatened, but whose interests are directly served by supporting those allies in Europe whose territory is threatened—is the basic element which gives meaning to the term "Atlanticity."

It is this "Atlanticity" which distinguishes NATO from the European Economic Community, or the nine—or ten, or the Western European Union, or any other grouping of Western European Nations. When I refer to our interests being directly served—by maintaining the clear capability of reinforcing and resupplying our NATO allies—I am recognizing, as did the founding fathers of NATO, the virtually complete interdependence of the industrialized nations of Western Europe and their North American allies. The United States, and its allies and friends, are heavily reliant upon ocean commerce—for the raw materials and energy resources to support our industries—and for access to each other to market our products. Historically and today—we are by economic necessity a maritime nation. We must maintain clear maritime superiority—to keep our long lines of supply and commerce open—both in war and in peace.

My primary mission as commander in chief of the Atlantic Fleet is to provide the naval forces to protect those sea lines of communication vital to the reinforcement and resupply of Europe. During a war in Europe, we shall send across the Atlantic 1½ million men and 28 million tons of equipment and resupply material in 6 months. The bulk of this material will go by sea—in something over 3 thousand ship transits. Our ability to protect this military cargo and essential economic shipping is vital to a successful defense strategy.

We and our allies have a significant advantage over the Soviets. Their naval forces must pass through geographically constrained "choke points" to gain access to the maritime battleground in the open ocean areas of the Atlantic. Their northern fleet must transit the Greenland-Iceland-Norway gap, and their Baltic Fleet must exit through the Skagerrak. We and our allies own the real estate that sits astride these choke points. Our mutual defense agreements and maritime strategy must maintain and capitalize on this advantage.

In order to offset the growing numerical superiority of the Soviet Navy, we will exploit this geographical advantage—and our sea-based tactical air capability. If the Soviets can deploy their forces unopposed into the broad ocean areas of the Atlantic, the NATO forces required to protect essential shipping will be significantly greater. This forward defense is the key element of our strategy in the North Atlantic.

To successfully implement this forward defense strategy, we must be able to immediately reinforce Norway. This could require us to quickly deploy an amphibious task force and mobile logistic support forces—in addition to three or four carrier battle groups to the North Atlantic as soon as possible in a general war. Delay would cost us heavily in terms of probability of success and level of losses.

The successful defense of Iceland and Norway are essential to the forward defense strategy. Were the Soviets to achieve control of either of these countries, they could forward-base their forces—greatly increasing the effective range into the North Atlantic of their submarines, aircraft, and surface ships.

A significant event during the past year was the request by Spain to join the NATO alliance. This request may well be approved by all members of the alliance this year. Upon entry into NATO, she will contribute significant additional naval forces and strategically important naval support bases. Spain's current efforts to reduce Soviet use of maritime facilities in the Canary Islands is significant.

Offsetting this good news, however, was the decision by the Government of the United Kingdom to shift the war-fighting emphasis of the Royal Navy. They have chosen to deemphasize their surface escort forces and to reduce their ability to provide convoy escorts for essential military and economic shipping.

Despite our forward defense strategy, predeployment of Soviet submarines before a conflict—and subsequent penetrations by their units into the open ocean areas—will make direct defense of shipping a necessity, especially in the waters near Europe. I am disappointed by the British action to reduce their destroyer and frigate force by about 30 percent—from 59 to 42 ships. Prior to this decision, the United Kingdom provided about 70 percent of the surface units available in the Eastern Atlantic. The requirement for adequate surface forces in this area is the subject of ongoing discussions between us and our NATO allies.

CARIBBEAN

There is a major chink in our strategic armor—the rapidly growing military capability of Cuba, supported by the Soviet Union. I have been greatly concerned by the continuing Soviet buildup of Cuba. During the past year, the Soviets put more military equipment into Cuba than in any year since the Cuban missile crisis in 1962. The Cubans now have a large number of fighter/attack aircraft—including the most modern Mig-23 "Flogger" type. They have two capable *Foxtrot* class diesel submarines. They are building improved naval and air bases to support this new equipment. This extensive military buildup—combined with the recent near continuous deployment of two or more Soviet "Bear-D" reconnaissance aircraft—operating out of Cuba, and conducting routine surveillance of our naval forces operating off the east coast—demonstrates the key military value they place on Cuba's strategic position in the Caribbean.

In peacetime, the Caribbean is of great economic importance to the United States. It is both a major oil refining center and a transshipment point for crude oil moving to the United States from Africa and the Persian Gulf. Cuba sits astride the vital shipping lanes in the Caribbean in much the same way Iceland sits astride the Greenland-Iceland-Norway gap. Large quantities of our essential peacetime crude oil supplies and economic shipping must pass through this "choke point." Sixty to Seventy Percent of U.S. oil shipping moves through the Gulf of Mexico and Caribbean. This equates to approximately 30 percent of current total U.S. oil supply.

In wartime, the area would become even more strategically important due to the large amount of reinforcement and resupply shipping that originates out of gulf ports—and the shipping that passes through the Panama Canal—both of which must transit restrictive straits and passages in the Caribbean to reach the Atlantic. We must insure the security of these shipping lanes from the threat from Cuban forces—or from Soviet units forward based in Cuba—while proceeding with the reinforcement of Europe. We cannot afford to delay that reinforcement.

Let me be clear—there is no doubt that we can and will neutralize the Cuban threat. But it is important to recognize that the forces required will be at the expense of those presently committed to other objectives. In other words, with current forces we are only capable of executing our strategy sequentially. The forces needed to secure the Caribbean are also needed to insure the security of the North Atlantic and close the Greenland-Iceland-Norway gap. SACEUR needs these same forces in Europe to carry out his maritime tasking in the Mediterranean. At the beginning of hostilities some of these forces may be deployed to the Indian Ocean and some in the Mediterranean or Caribbean. The choice of the sequence may well belong to the Soviets and we may never gain the initiative.

Of equal concern is the expanding military influence of Soviet-supported Cuba in Central America. There has been an increasing level of Soviet-backed Cuban support for insurgent elements beginning in Nicaragua and extending into El Salvador, Honduras, and Guatemala. Cuba provides direct support to the Maurice Bishop government in Grenada—where a large international airfield is being constructed by the Cubans—and which will be capable of supporting long-range Soviet reconnaissance and attack aircraft. Unless expanding Cuban support and involvement is contained, their influence will be extended throughout Central America—and result in a significant increase in Atlantic Fleet requirements to provide the necessary level of security throughout the region.

During the past year we have revised most of our contingency plans for the Caribbean to account for the increased threat from Cuba—and we have shifted the centroid of the Atlantic Fleet training activity to the Caribbean. Some essential command rearrangements have been made to allow us to better deal with the situation in the area. Creation of the U.S. Forces Caribbean Command (COMUSFORCARIB)—A subordinate unified command under CINCLANT—permits us to integrate our planning and operations for the entire area more effectively than before.

SOUTH ATLANTIC

Another area of concern is the South Atlantic. In peacetime, the South Atlantic is of significant economic importance to the United States. Increased Soviet naval and air operations—and available support facilities in the region—improves their capability in all mission areas. Our ability to maintain adequate surveillance and to protect the South Atlantic sea lines of communication places us at a distinct disadvantage and is a potentially high risk situation.

As the Soviets continue to build *Delta* class SSBN's—and the larger, more capable *Typhoon* class—they will need more dispersed areas to operate them—where they can take full advantage of their long range missiles and extended on-station times. As more of them become operational, I would not be surprised to see them start to operate in the South Atlantic. Should such SSBN deployments become routine, the Soviets will need a forward base in West Africa—such as our own base at Holy Loch.

I am, therefore, seriously concerned about the number of countries which currently provide port facilities to the Soviet Union along the vital South Atlantic shipping routes. The increased instability in the region, as exemplified by recent events in Ghana and Liberia, may further diminish our own limited regional access.

To support the postulated deployments and forward basing of submarines, the small but continuous Soviet naval presence in the South Atlantic could be expected to grow—as they put more surface units in the area. This would put them astride the sea lanes which carry Middle East oil to us and our European allies. I might also point out that Nigeria—on the west coast of Africa—is currently the second largest supplier of oil to the United States. Eighteen to twenty percent of the total U.S. oil supply depends on the security of the South Atlantic and its sea lanes—while our European allies get 65 percent of their oil via the South Atlantic.

These same South Atlantic sea lanes also carry the bulk of the vital raw materials and resources upon which our industry depends. We are vitally dependent on South America and Africa for these resources. For example, the United States currently imports more than 90 percent of its chromium—which is necessary in the production of high grade stainless steel. We use this high grade stainless steel for ball bearings, precision instruments, and controls. It is critical in the production of automobiles, jet engines, oil refineries, computers, conventional and nuclear powerplants, solar energy conversion units, modern food processing facilities, and hospital operating rooms. A single jet engine requires about 1,500 pounds of chromium. More than 95 percent of the world supply of chromium comes from Zimbabwe and South Africa.

During periods of heightened tensions, Soviet naval forces in the region could threaten these vital shipping routes to the point that the Atlantic Fleet would be required to deploy additional forces to establish and maintain sea control. At current force levels, we would be hard pressed to provide an additional, continuous peacetime presence in this area to counter growing Soviet and Cuban activity. In wartime, securing the South Atlantic would be at the expense of forces needed elsewhere. It would have to be a sequential operation—deferred until other, competing priorities were accomplished. Suffice to say, the Soviets may not permit us the luxury of such sequential mission execution.

OTHER AREAS

The Mediterranean Sea and Indian Ocean areas differ from the previous three regions discussed in that these are out of the Atlantic Fleet area of responsibility. I am not tasked to directly meet the challenge—but I am required to supply forces to the commanders in these areas to help them counter the threat. Currently, the Atlantic Fleet has one carrier battle group in the Indian Ocean and another in the Mediterranean. In the event of war, the forces required in these areas would increase—placing further demands on our already limited resources.

During the past year, the steady state commitment of two carrier battle groups continuously in the Indian Ocean has been reduced to an average of one and one-half. This necessary change gives us some welcome slack—and provides us some flexibility to provide peacetime naval presence in other areas when it is needed. With this change we will still have the dominant force in the Indian Ocean. Support for our allies—and our desire to maintain stability in the region will continue undiminished. We now have some ability, however, to provide increased presence in the Caribbean—and to support more exercises in both the Atlantic and Mediterranean.

OVERALL ASSESSMENT

As I told you last year, the U.S. Navy is approaching the limit of peacetime capability. The relative balance between the U.S. and Soviet Navy is still too close to call. I agree with Admiral Hayward's assessment that our margin of superiority has vanished—and any reasonable estimate of the naval balance falls well within the range of uncertainty.

The lack of a peacetime surge capability limits our ability to respond to crises if called upon. In many situations, we would clearly prevail. In other cases, however, we could find ourselves with our forces maldeployed and could be unable to adequately meet the situation. The span of options available to our political leaders is narrower than it should be.

Adequate forces—in terms of the minimum number of carrier battle groups required for North Atlantic/Norwegian Sea operations—are not available without redeployment of forces from other areas. The Atlantic Fleet can provide only two carrier battle groups on-station in the North Atlantic within the first few days following mobilization. Manpower shortages, although improving, continue to exist. Maintenance support, spare parts in inventory, and availability of carrier airwing aircraft continue to limit Atlantic Fleet resources for immediate additional tasking anywhere in the Atlantic theater.

To give you an example of the current operational tempo, during the height of the Vietnam war, between 1965 and 1970, each of our ships averaged about 75 days per year deployed away from home waters. Today, in carrying out the peacetime tasks assigned by our political leadership, each of our ships is deployed an average of about 100 days per year. We are now in a position where a requirement for ships or battle groups to meet a new contingency situation requires drawing down our forces deployed elsewhere.

In shirt sleeve English this means, in order to influence events in favor of the United States in one area, we must reduce our event influencing capability somewhere else. For instance, 2 years ago—to meet the requirement to deploy two carrier battle groups to the Indian Ocean—we had to take one carrier battle group from the Mediterranean. This lack of a surge capability is of great concern to me—both as to our ability to respond quickly to crises and our ability to respond adequately in case of war. This form of maritime balance—the balance between forces available to fight and the commitments levied upon those forces by our political leaders—will dictate the strategy we must follow should we be called upon to fight a war in the Atlantic.

In a general war with current force levels, we would be dealing with a relatively high risk situation in the Atlantic. At issue is the principle of concentration of force—we must be able to concentrate sufficient forces in order to be effective. The level of risk can be reduced by increasing to 15 the number of active, in-service carrier battle groups. The increased appropriations for ship construction and aircraft procurement included in this year's Navy budget request will help to eventually alleviate overall Navy force structure deficiencies.

Authorization this year for construction of two new large-deck nuclear-powered aircraft carriers will be a major step forward to establishing and maintaining a minimum necessary level of carrier battle groups. Programed increases in our F-14, F/A-18, and other aircraft inventories are essential to the modernization of our carrier airwings. This modernization is necessary if we are to keep pace with the increasingly complex air battle requirements.

The large-deck, nuclear-powered, *Nimitz* class aircraft carrier is currently—and will remain so for many years to come—a most efficient and effective platform for credible power projection around the world. The large deck capacity enables us to operate a significant number and mix of attack, fighter/interceptor, and ASW aircraft from each carrier. The nuclear power capability enables us to move the carrier and its escorts at high speed to quickly respond to emerging crisis situations, to remain almost indefinitely on station, and to use their additional storage capacity for larger quantities of aviation fuel, air delivered munitions, and refueling of conventionally-powered escorts.

While our most important and vital asset is sea-based tactical air power, I am concerned with more than aircraft carriers. We also require surface combatants with credible offensive firepower, as well as additional battle group escorts, and mobile logistic support ships. I support the reactivation of *Iowa* class battleships, fitted out with "Tomahawk" and "Harpoon" missiles, as the platform providing the most appropriate mix of peacetime presence, wartime capability, near-term availability and economic feasibility.

Reactivation of the U.S.S. *New Jersey* is a most welcome event. There are many areas such as the South Atlantic, the western approaches to the Strait of Gibraltar—and in most parts of the Caribbean Basin which represent ideal operational scenarios for employment of the recommissioned battleships. The Pacific Fleet commander has similar areas where the battleships can be effectively employed in place of our aircraft carriers, relieving them of some of the deployed commitments and giving us more flexibility in their deployment.

Some skepticism still remains regarding the value of the *Iowa* class battleships. This ship class was built to "go in harm's way"—to withstand the impact and explosion of 2000 pound—mach 3.5—projectiles. Originally, the threat was 16 to 18 inch "bullets" from other battleships and iron bombs from attack aircraft. Today, the weapons effects are similar—the 2,000 pound projectile however is a more modern air-to-surface or surface-to-surface missile. The battleship *New Jersey*—armed with its nine 16-inch guns—will be the first surface combatant to deploy with the "Tomahawk" missile aboard. This will be an effective deterrent in peacetime and a most formidable resource in wartime. The need for fast, well-armed surface combatants is clear—and the survivability of battleships makes them an excellent weapons platform to meet the anticipated threat in areas such as the South Atlantic.

I continue to place high priority on improving fleet air defense capabilities. We must insure sufficient numbers of *Aegis* cruisers are in our shipbuilding program to support 15 carrier battle groups—plus an inventory of extended range, surface-to-air, standard (SM-2-ER) missiles sufficient to support the *Aegis* cruiser's mission. The DDGX program is also badly needed to provide a lower cost complement to the *Aegis* cruisers. This will permit us to replace the aging guided missile destroyers which now represent the bulk of our fleet air defense capability.

Amphibious lift assets in the Atlantic Fleet are inadequate to meet Marine Corps requirements. As General Schwenk will tell you, his forces are ready for combat—but I can provide amphibious lift capability for less than one-half of his ready force. We need additional ships to lift at least one Marine amphibious force (MAF) plus one amphibious brigade (MAB).

As the principal naval commander in the Atlantic, I also have the responsibility to provide sufficient naval gun fire support for amphibious assault operations. There is currently no large-caliber naval gun fire capability in the Atlantic Fleet. Surface combatants with 5-inch gun fire support capability will be limited and most units will probably be assigned to ASW or air defense roles within the battle groups. This increases the risks to the Marine amphibious assault forces and impacts on the success of any future over-the-beach assault operations.

I am happy to report that the increased levels of operating and maintenance funding appropriated by Congress during the past year are starting to take effect. The adverse trends that I reported to you last year are being reversed. However, we have a long way to go to restore the balance and regain a comfortable margin of confidence. I would like to quickly review and update the readiness, sustainability, and personnel issues that I addressed last year.

Last year, I reported to you that we were experiencing a significant decline in operational readiness rates within the fleet, primarily due to personnel losses. Personnel readiness in the Atlantic Fleet has improved dramatically during the past year, primarily as a result of wise congressional action in the area of pay and compensation. It is too early to fully assess long-term trends due to the continuing high tempo of operational deployments and the reduced employment opportunities in the civilian labor market, but the initial indications are encouraging.

In the near-term, the shipboard personnel situation has improved. In spite of higher retention of career personnel, the fleet's ability to support sustained combat operations is still degraded by the continuing lack of sufficiently trained technical personnel to effectively operate and maintain weapon systems, and the lack of sufficient numbers for sustained high tempo operations.

To capitalize on the ability of our people, we must continue to provide increased funding for training, steaming time, and flight hours to insure that our current forces maintain a high level of operational readiness. Budgetary reductions—such as occurred this year—imposed after a significant part of the fiscal year has passed—requires reprograming efforts that are not cost-effective, create an unstable training environment, and magnify the impact of such cuts on readiness.

There is an established OPTEMPO threshold below which training effectiveness falls off rapidly and critical combat skills cannot be maintained. This year's O. & M. budget will allow us to operate, train, and maintain our forces in an acceptable state of readiness. We must acknowledge the added expense of such operational realities as Indian Ocean operations and increased Caribbean presence. They will continue to affect us in terms of lower unit combat operational readiness rates, deferred ship overhauls, and aircraft rework programs.

For the fiscal year 1983 program, our budget for ship steaming days and training operations is adequate. A quarterly OPTEMPO of 28.5 days in secondfleet and 53 days in sixthfleet—or a combined tempo of about 34 days per quarter—is sufficient to meet operational and training requirements. The fiscal year 1983 flying hour program is budgeted at 88.3 percent of proficiency maintenance requirement (PMR) of which 2.8 percent is simulator training. Funding at this level should be adequate to accomplish the desired minimum of 88 percent PMR.

I am still concerned about our ability to sustain our forces in combat. We must improve our sustainability for other than a short war. It will do us little good to win the first few battles if the Soviets can simply outlast us. The possible outcomes of a "short war" are first, that our opponents give up—which is unlikely; second, that we surrender—which is unthinkable; third, that we go nuclear—which is catastrophic; or, fourth, that we control hostilities with conventional forces. This last option gives our leaders the chance to replace conflict by negotiation—and is the only acceptable outcome.

We must be able to conclude a war with forces which are superior to any opponent. One of the mistakes frequently made by systems analysts is to analyze war as a zero sum game—and draw the forces of each side down to zero. Bear in mind that for military leaders to be able to present to our political leaders a basis for replacing conflict by negotiation—we must have sufficient residual forces, munitions, and supplies to continue fighting a credible campaign. This is the meaning of sustainability.

Conventional force capability must be the heart of our deterrent. Our maritime staying power makes it a sustained deterrent—a credible deterrent. Give the Soviets a reason to doubt this—by planning for a short war—and we are suddenly a giant step closer to relying on nuclear weapons. To those who might be intellectually persuaded by the perceived merits of the "short war theory," I would address a question: "What if you are wrong?"

On the positive side, we began last year, and continue in this program year, the process of acquiring supplies and equipment to be pre-positioned in Norway. Our ability to quickly reinforce the northern flank is critical to our forward maritime defense strategy. Without adequate pre-positioned supplies and equipment, a determined Soviet surprise attack could make the defense of northern Norway untenable. With sufficient pre-positioning, we reduce the amphibious lift and logistic support force requirements. Norwegian forces—supported by American and allied forces—should then be able to hold this critical area.

On the negative side, currently available fuel and pre-positioned war reserve stock levels ashore in the Atlantic area can support sustained combat operations for only a short period. We must provide the necessary ordnance, weapons, spare parts, and maintenance support our sailors and marines need if called upon to fight. Level-of-effort weapons, such as bombs, could support full scale combat operations for some time. Individual threat-oriented weapons, such as MK-48 torpedoes and Phoenix missiles, however, would probably be expended very quickly.

Spare parts deficiencies and inadequate support facilities impact adversely on our capability to support sustained operations. For example, cross decking has become a way of life since the early 1970's due to inadequate funding of requirements for spares and depot repair items. I have seven aircraft carriers in the Atlantic Fleet—six operational and one in the service life extension program (SLEP). Significant cross deck action occurs when four or more carriers are either deployed or in predeployment workups. Cross decking of 10 to 15 percent of a ship's allowed high usage repairables can be expected. The fitting out of *Carl Vinson* (CVN 70) this year will increase the demand for critical components.

Maintenance and repair support funding has not been adequate to prevent cannibalization of major end items. The major cause for cannibalization is the lack of available shelf stock. The major constraints in providing ready-for-issue shelf stock have been funding deficiencies for component rework and for procurement of new components.

Funding for overhauls and availabilities remains a significant challenge to O. & M. appropriation requirements. As an example, each year there are unanticipated emergent requirements which must be funded. Funds to cover these emergent problems have not been programed at levels of past experience. As a consequence, when an unexpected event occurs, we fund our requirements out of existing programs.

Military construction and operating funding levels to support the shore base structure have been inadequate to maintain the required level of base mission capability. Age and lack of funds for maintenance have caused facilities and utility systems to deteriorate to the point of impairing support to fleet units. The weapons station at Earle, N.J. is a case in point. We need to put two more ammunition ships there because of explosive safety considerations in Norfolk. The new pier and associated support system will cost about $187 million. This facility is needed now but it has been delayed and remains unprogramed.

In recognition of these deficiencies, the Navy budget for fiscal year 1983 provides for increased stocking objectives of all categories of weapons and parts support—and provides for the funding to achieve these new levels by fiscal year 1989. Any future wartime situation will be dealt with by forces already trained, ready to fight, and properly supported by facilities already available. I urge this committee to continue support for an O. & M. budget that will correct the deficiencies.

SUMMARY

I ask you to include the following when you consider the operational readiness of the Atlantic Fleet:

Current assets are inadequate to execute simultaneously all major requirements of general war. The reinforcement/resupply of Europe, the protection of the sea lines of communication, the defense of the strategic island outposts, offensive operations against Soviet support installations fronting the South Atlantic, and the maritime reinforcement of European and Pacific Fleet naval commanders, are all tasks which must currently be prioritized. A deterrent posture cannot be bought once and be expected to retain its effectiveness forever.

The next decade will be a dangerous one for the Navy and for our Nation. While the construction and procurement program contained in the 5-year defense plan is designed to provide needed improvements, history has not been kind to us in the achieving of outyear force levels. We must carry through with Navy programs in the budget. In my judgment, we need to achieve a force level of at least 15 carrier battle groups—and continue the program to recommission the four *Iowa* class battleships. This will give us an improved ability to respond to crises—and the flexibility to meet peacetime commitments with an adequate surge capability.

One of the things which continues to give us an edge over the Soviets is the magnificent capability of our soldiers, sailors, airmen, and marines. The excellent compensation legislation you have passed over the past several years has removed pay as the primary cause of the experience drain. We are now taking those leadership measures which will capitalize on that advantage. The retention trends are up—but the problem will not be solved immediately. We have created raised expectations which need to be fulfilled if the All-Volunteer Force is to continue to work.

As I said earlier—the Atlantic Fleet is stretched thin—nearly to the limits of peacetime capability. Even without serious additional degradation in material readiness and personnel retention rates, our fleet assets are inadequate to simultaneously meet all NATO requirements in addition to national tasking. Overall, the readiness of Atlantic Fleet forces to respond to general war and contingency tasking, and their ability to support sustained combat operations, is still less than adequate as a result of prior budgeting constraints and earlier losses of highly qualified personnel. The trends now have been reversed—they are positive. We must commit ourselves to a long-range, sustained fleet rebuilding program if we are to reduce the risks and regain clear maritime superiority.

Let me end on a positive note. The United States has many things going for it, particularly in the maritime arena. Unlike the Soviets and the Warsaw Pact countries, we have a seagoing heritage—and a tradition of victory at sea not enjoyed by our opponents. We have the advantages of geography—being at the center of the maritime stage. The Soviet Navy is at the edges—with limited access to the open oceans—constrained by choke points.

We—and our allies—have first class fighting organizations—regularly exercised and remarkably successful. In assessing the NATO alliance, we should remember that it is an historic achievement for troops, ships, and aircraft from 13 countries to share operating procedures and tactics and be able to work together effectively. We also have the camaraderie and fighting spirit which win battles. We should put this in balance, as we listen to criticisms of a lack of political cohesion in the alliance.

This administration's determination to build toward clear maritime superiority in this decade—and the congressional position clearly stated in the "sense of Congress" amendment to the 1982 Defense Appropriations Act—give me confidence that we will achieve this objective. The CNO summarizes my feelings very well—"We are a Navy on the move—we have momentum—and it is in the right direction."

Thank you, Mr. Chairman and members of the subcommittee. I am ready to answer any questions.

Senator HUMPHREY. Thank you, Admiral Train.

Admiral Watkins?

STATEMENT OF ADM. JAMES WATKINS, COMMANDER IN CHIEF, PACIFIC FLEET

Admiral WATKINS. Mr. Chairman, I have submitted a classified and unclassified statement that I would like to have entered into the record, and if you will permit me to say a few words, I will give you an oral summary of the contents of these statements.

Senator HUMPHREY. Yes.

Admiral WATKINS. Many of the strategic concepts save geographic differences are identical to those described by Admiral Train, and for the sake of brevity what I would like to do today is focus on some of the specific readiness indices of the Pacific Fleet, both of which we use, some of the net assessments as we view our ability to deter and as necessary to defeat the Soviet navy in the Pacific, and a summary of our primary areas of concern with which the Congress can give us some help, and then a closing summary statement.

PACIFIC FLEET READINESS

The readiness of the Pacific Fleet has definitely improved over the past year, and while there has been insufficient time to reap the full benefits of the recently augmented resources applied to readiness sustainability and force levels, all the vital signs are positive. The authorized 1981 and 1982 resources plus the fiscal 1983 request before the Congress, if brought to fruition, will allow us to regain maritime superiority in the Pacific by the end of the decade.

In the interim, while current force levels are inadequate to assure victory and certain readiness and sustainability deficiencies exist, I think we are making the best of what we now have, and our readiness is optimized accordingly. At any rate, the precipitate readiness decline of prior years has been arrested. Current readiness posture has been stabilized and is now on the way up.

Lieutenant General Davis of my Fleet Marine Force is with me here today, and will separately report on the Marine Corps readiness within the Pacific Fleet.

Our mission assignments, of course, are very similar to those of the Atlantic Fleet Commander, to provide combat ready units in both peace and war, to assure control of the sea in the Pacific Command area from the southern tip of Africa to the southern tip of Mexico. The Pacific Fleet must also defend the United States against attack throughout the Pacific and support operations of our allies and other operational commands, an ambitious tasking, with over 100 million square miles of ocean.

Since taking command of the Pacific Fleet last summer, I have undertaken a comprehensive assessment of the United States vis-a-vis the Soviet and the Pacific Fleet. The assessment consists of the capability assessment which assesses the unconstrained capability of each fleet. That is, the assumption that all weapons systems operate at advertised levels of effectiveness. We can do a readiness assessment that tells what percentage of those unconstrained capabilities we can bring to bear in battle, and we try to make a similar assessment on the Soviet capability.

In addition to those somewhat static parameters, we do dynamic war gaming, and I think in a very sophisticated and realistic way today, with the computer giving us a great assist, and the final result of that assessment in brief, and I will talk about some of the other aspects of it in detail later, is that if we were able to put several carrier battle groups massed together with defense in depth, which is our concept of fighting a war, in each of the three high-threat environments of the likely regional scenarios in the Pacific, Northwest Pacific, South China Sea, and the Indian Ocean, we would win today with minimum losses.

On the other hand, when the real world factors in readiness and sustainability and extant low force levels are considered, the outcome becomes a tossup in the gray zone of uncertainty that Admiral Train mentioned. The overall net assessment, then, dictates a war-fighting strategy of sequential operations which give rise to the uncertainties in outcome.

READINESS

Now, readiness. Measurement requires complex blending and interpretation of many indices. These include both static and dynamic measurements. A well-known joint system called Unit Rep is only one static measurement, and I have submitted some graphs in my classified statement which show trend lines over the past year that clearly indicate that from this one source of management information we are in better shape today than a year ago, but there are other indicators.

For example, in aviation, there are four specific indicators that provide insight: Flying hours to maintain air crew proficiency; airframes on extension beyond normal service life; bare firewalls and airframes that could otherwise be flying; cannibalization rate, which is a component spares problem. Now, increases in funding in prior years have had very positive effects on the first three of those aviation indices. On the other hand, lack of supported funding requests in the latter category, cannibalization, have shown no improvements and turnaround has not yet taken place.

SHIP OPERATIONS

In ship operations, the operating tempo is generally satisfactory. We consider that we are at the minimum essential to satisfy planned training and maintenance requirements. We have to divide those operating days, as you know, between deployed forces and forces in the eastern Pacific. We have been driven in past times somewhere in the mid to latter portion of the seventies below these levels, and they have proved unsatisfactory.

As you well know, maintenance aboard ship becomes critical, and all of our maintenance factors say that we must be operating a certain period of time to insure our weapons systems are up and functioning, tested properly, and the like.

OVERHAUL EXTENSIONS

Overhaul extensions and late deliveries are another index. We see a direct correlation between overhaul extensions and decreased readiness. Two ships in overhaul, for instance, lowers percentage of combat ready ships by approximately 1 percent in the Pacific Fleet. Last year we lost 97.5 ship operating months, a full year's battle group, if you will, lost due to overhaul extensions, and since more than the normal number of ships begin their overhaul in April 1982, we are concerned about the impact potential for extension this year.

Now, we are taking certain initiatives in overhaul management that I think are going to partially alleviate this situation. We are going to minimize and are minimizing unplanned work package growth, and I am personally involved in this effort. We are going to download public shipyards by a shift to private yards, and our first complex overhaul of a battle group destroyer in a private yard, unannounced at this time, is scheduled on the west coast this year.

To assist, then, we must maintain the civilian personnel ceilings at our naval shipyards, and we must increase the supervisor shipbuilding civilian ceilings for managing increased private workload. The 1983 budget submission does this. I just wanted to express my very special support for this one area, because oftentimes, because they are outlay dollars, these elements get cut, and while there is no intention to reduce readiness, in fact they do.

The late delivery of new construction ships strains manpower resources and reduces full planned force levels. For example, two 688-class SSN's were delivered over 3 years late to the Pacific, and three 963-class destroyers 2 years late, in the past couple of years, plus many others. So this combination of extensions in overhaul and late deliveries does not produce for the fleet the force levels authorized and funded by the Congress in a timely fashion.

The Secretary of the Navy has taken extensive measures to encourage shipbuilders through incentive contracts to deliver the new ships on time to the Navy, and I think we are going to see improvements here in the days ahead.

AMMUNITION READINESS

Current shortages of both level-of-effort and threat-oriented weapons adversely impact our ability to fight for any protracted period. This is both a readiness and sustainability problem. Funding in prior years was inadequate to keep pace with either growing inventory or training requirements, but the fiscal 1983 budget submission is adequate, although the current shortages will persist for the current leadtime until fiscal 1985, and there is little more that can be done here except to support the 1983 budget in this area.

In the interim, to compensate for the shortfall, we are forced to cross-deck weapons between nearly fully loaded ships in the western Pacific about to go home and those arriving half empty starting deployment. This allows very little weaponry available for real world contingencies that could occur in the eastern Pacific, such as supporting the Atlantic Fleet Commander, were we to have any contingency operation in the Central American area.

We must airlift weapons to the continental limits from overseas, instead of bringing them back by ship, in order to shorten the maintenance pipeline. We must curtail expenditure of weapons for training, and we must allocate all new missile buys under a burdensome system called sharing the shortages.

MATERIAL READINESS

Aviation repairable component support remains a problem area. Shortfalls in near-term component rework funding reduce our ability to refurbish repairable components, and I have indicated the dollar amounts in the classified statement.

To accommodate these shortages, then, we routinely cross-deck components between our aircraft carriers and other ships as with weapons. We draw down stocks at our air station in the continental limits, and we cannibalize training squadrons to insure that deployers have required minimum levels. Again, the 1983 budget submission fully funds component rework and needs to be supported.

Now, I would like to talk about specific warfare mission areas which are submerged within the indices that I just discussed.

STRATEGIC FORCE READINESS

The last Polaris submarine was removed from the Pacific strategic force last October, so the sea leg of the Triad is now solely in Atlantic waters. *Ohio,* the first operational Trident, comes on line in the Pacific next October, and this, of course, will result in a significant increase in the Pacific strategic deterrent postures.

The follow-on Tridents will come to the Pacific in the remainder of this decade.

INTERMEDIATE RANGE NUCLEAR FORCES

The introduction of a nuclear version of Tomahawk, land attack cruise missiles in fiscal year 1984 will significantly increase the theater nuclear arsenal. It will provide a capability to strike land targets from survivable sea based launchers and provide a deterrent against Soviet sea-based options. In the interim, all of our theater nuclear force systems are already in programs that have been instituted to increase the Pacific Fleet's capability and readiness to counter and survive in tactical nuclear attacks.

GENERAL PURPOSE FORCE READINESS

As far as force levels are concerned, within the past year we have done well. Our total battle force increased by 5 ships to 221 ships, but significant change in quality occurred by introducing two 688 class submarines, one DDG of the *Kidd* class, two FFG-7's of the *Perry* class, three new support ships. We have only decommissioned one old tender, and two aged SSBN's.

Within the next 5 years, the Pacific Fleet total battle force will grow to about 260 ships if the shipbuilding program is carried out.

NEW CONVENTIONAL WEAPONS

Tomahawk cruise missiles' initial operational capability for submerged launched and surface ship launched Tomahawks with conventional warheads will arrive in fiscal year 1982 and 1983 respectively. We are developing the doctrine and deployment tactics now, and in less than 4 years we will have significant numbers of these weapons operational within the Pacific Fleet.

EXTENDED RANGE MISSILE

This is the Aegis missile mentioned by Admiral Train, it is now in the fleet for the U.S.S. *Jouett* in the Pacific and will be put on follow-on ships this year. Fourteen more ships receive the Harpoon weapons system, which is now included on over 62 surface ships, 13 submarines, aviation tactical air, and P3 squadrons.

We are also putting tremendous emphasis on tactical training readiness for war fighting. We are concentrating on enhancing our capability and readiness in all of these areas, with particular emphasis on our battle group commanders and our composite warfare commanders. Major mission areas have either held their own or improved over the past year in battle group performance, and I have provided some graphs in the classified document to show how we monitor and watch the performance across all warfare areas in our battle groups.

Personnel readiness I will handle separately, because I think it is so special and so important. The overall readiness trend is primarily due to very positive factors in personnel retention. Readiness indices will remain constant, however, or possibly slightly improved over the next 6 months, because we are also a growing Navy. In the Pacific fleet alone, 2,000 additional career billets because of new ships entering the Pacific Fleet will somewhat offset the total gains.

On the other hand, the situation is now manageable. It is under control, and at the end of this year we will begin to see real growth in the experience levels.

Retention improvement was brought about largely by two things. First, thanks to the Congress for the tremendous support in the compensatory packages in the last 2 years, but equally important has been the receptivity of the U.S. Navy again in the minds of the American public. This has had a tremendous impact on our people.

The CNO's emphasis is on pride and professionalism. Second, we are now focusing on the right issues again.

SUSTAINABILITY

Within the Pacific Fleet we view sustainability as the ability to conduct operations over a protracted period of time against a probable opponent, but we are still operating with shortages of people, ordnance, and spare parts, and as a result the extraordinary measures that I mentioned earlier are being taken to shift these assets from place to place. Yet in spite of playing musical chairs with these resources, we still can't fill our deployed units for fighting levels of ordnance. Therefore, sustainability issues become merged with readiness issues.

So what is the net assessment vis-a-vis the Soviet Union? On our side, over the past year, we have improved in capability to fight in a global protracted conflict by addition of new, capable platforms carrying advanced weapons systems which meet the threat, honing our war fighting skills and taking initiatives to get the most out of the assets that we have.

On their side, the Soviet Pacific fleet still continues to improve its capability to carry out its mission to deny United States and allies free use of the seas. They, too, are concentrating on quality. They still outnumber us in the Pacific by 37 combatants. Additionally, over the past 2 years, the Soviet Pacific fleet has added a regiment of Backfire long-range supersonic bombers in Northeast Asia. They have also added a number of Victor SSN's, the latest in their attack class, while discarding several old, less capable diesel submarines. This represents a formidable quality increase.

While our capability would theoretically permit winning a battle in a high threat environment, one region at a time, our readiness and sustainability degradations and inadequate force levels, which dictate a strategy of sequential operations, move us into that zone of uncertainty in predicting outcome of the war as a whole, and I don't think as an island nation we can afford to continue this uncertainty. The relative balance has therefore remained essentially the same as a year ago.

However, there has been a change from last year. A year ago we were moving negatively through this gray zone of uncertainty as to whether we would prevail. This year indicators have stabilized within that zone and a turnaround in direction of trends has occurred. The fiscal 1982 authorization and fiscal 1983 budget submission with its 5-year program are in the right direction.

In summary, I hope I have conveyed the sense of near-term readiness urgency that exists within the Pacific Fleet. We will continue to do everything within our power to recover maritime superiority while managing our scant resources carefully.

We will maximize deployed force sustainability until personnel, ordnance, and spare parts inventories permit relaxation and assignment to nondeployed units for contingency purposes. We will plan for sequential operations until force level enhancements arrive, and since personnel readiness underlies all other factors, we will encourage you and everyone involved in the process to maintain the current positive momentum.

We shall continue to do our utmost to accomplish our basic mission of providing the American people combat-ready units in both peace and war.

Thank you very much.

[The prepared statement of Admiral Watkins follows:]

Prepared Statement of Adm. James D. Watkins, U.S. Navy, Commander in Chief, U.S. Pacific Fleet

Mr. Chairman and distinguished members of this Subcommittee, it is my distinct privilege to appear before you to provide my report on Pacific Fleet preparedness. In sum, 246 ships, more than 2000 aircraft, and over 300,000 personnel of the Pacific Fleet have improved over the past year; but time has not been sufficient to reap full benefits of recently augmented resources applied to readiness, sustainability, and force levels. Force levels are inadequate to assure victory today in a war with our most probable adversary, the Soviet Union's Pacific Fleet. Nevertheless, authorized fiscal year 1981 and fiscal year 1982 resources plus those submitted to the Congress for fiscal year 1983 will allow us to regain Pacific maritime superiority late in this decade. In the interim, we have achieved some successes in making the best of what we have, and I will discuss several management initiatives which have enhanced operational readiness. In the Pacific we believe the precipitate readiness decline of prior years has been arrested and our current posture has stabilized. For the future, the outlook is brighter if programs now underway can be brought to fruition. My subsequent statement is generally structured into the main categories requested by your staff and will cover only the Navy portion of the Pacific Fleet. As you are aware, an integral part of the Pacific Fleet is my Fleet Marine Force, commanded by Lieutenant General J. K. Davis. He is with me today and will report separately on the preparedness of Pacific Fleet Marines. The first category I will cover is "Mission Assignments."

MISSION ASSIGNMENTS

The mission of the U.S. Pacific Fleet is to provide combat ready units in both peace and war and to conduct operations to ensure control of the sea and air in the Pacific Command Area, which includes portions of the Pacific, Atlantic, Arctic, and Indian Oceans, and the Bering Sea.

This administration tasks the Navy to ensure that we have the capability to win a long, global, conventional war; emphasizes the need for a global strategy; and requires military power to implement that strategy. This is an ambitious tasking, yet one which I believe is right on the mark.

NET ASSESSMENTS

In coming to grips with our ability to prevail against the Soviets in any sort of conflict, I have undertaken a comprehensive assessment of the United States and Soviet Pacific fleets. Such an assessment is a complicated and difficult task because of many variables. Results, since there are few absolutes, can be viewed only as indicators.

In what I call a Capabilities Assessment, our procedure assesses the unconstrained capability of each opposing fleet. By unconstrained, I mean that the assessment assumes perfect performance of equipment, platforms, weapons systems, and people. It assumes no reductions in capability because of environmental factors, morale problems, or lack of training. In addition, we perform a Readiness Assessment of each fleet. This assessment tells us what percentage of unconstrained capabilities we are able to bring to bear in a battle. The Readiness Assessment is difficult to make, but we are making headway in understanding the complex variables involved. Our initial effort in this regard has identified fruitful areas where management attention has been applied to improve readiness.

The final result of this capabilities analysis is that, if circumstances allow several carrier battle groups outfitted with Tomcat/Phoenix employing the defense in depth concept to be massed together, we will sustain damage but win in a head-to-head fight with the Soviet Pacific Fleet. But this assessment only holds true if our Readiness Assessment is a high fraction of our Capabilities Assessment. We must have ammunition, fuel, foodstuffs, and parts support to ensure fighting sustainability.

Thus when you factor in readiness and our low force levels which preclude a war of attrition, the net assessment changes. Rather than being somewhat confident of winning a battle, or the war, inadequate force levels make it likely that major losses would be sustained and that the outcome could be a toss-up.

Sequential operations, forced upon us by our net assessment conclusions, degrade our ability to carry out our mission assignments with any assurance of success. So, I cannot yet assure you of victory in the Pacific against our most likely opponent. I need several more battle groups to assure victory and clearly establish Pacific maritime superiority. As Vice Chief of Naval Operations and now as Commander in Chief of the Pacific Fleet I have had the opportunity to see how force level requirements are derived. In my opinion, they are well scrubbed and based on the best analytic techniques available, so that I strongly support Navy's shipbuilding goal of achieving 15 deployable carrier battle groups in this decade. What the Chief of Naval Operations is asking you to build is clearly in synchronism with what we in the Fleet see is needed.

READINESS

Measurement of the Pacific Fleet readiness requires a complex blending and interpretation of many indices. Current methodologies, such as the familiar C-1 through C-5 unit readiness reporting system, have several weaknesses. For example, taking a snapshot of any one particular day of a unit's readiness can lead to wrong decisions concerning resource allocation and the readiness state of the fleet. However, some valid insights and management clues regarding readiness can be gained by plotting daily readiness to see underlying trends over time. We have taken this approach even one step further and employed a methodology which permits us to evaluate carrier battle group readiness as a fighting entity rather than as disparate parts—ship by ship, aircraft by aircraft—as in the unit reporting system.

I have submitted to the subcommittee several graphs which show the trend lines for overall unit readiness covering the past year. Those trend lines clearly indicate that we are in better shape now than a year ago.

Additional indices for assessing warfighting readiness include those also used within the Office of the Chief of Naval Operations to measure resource impact on areas of fleet readiness. My subsequent testimony will discuss readiness in terms of some of these indices as they pertain to the Pacific Fleet and where we see significant change or problems.

Aviation

Three specific indicators provide readiness insight on our mission capability rate: airframes on extension, bare firewalls, and cannibalization. In the case of airframes on extension and bare firewalls, dollars flowing to those programs have had a positive effect on readiness; we have not yet reached a similar turnaround in cannibalization. More spare parts funding is required to bring the cannibalization rate closer to zero.

Ship operations

Operating tempo is generally satisfactory in the Pacific Fleet. We would always like a few more days at sea but present OPTEMPO satisfies planned minimum training requirements.

In planning OPTEMPO, the assumption, of course, is that we will deliver new ships and complete overhauls of other ships on time so as to have adequate numbers of operating ships to provide for deployments, mutual services, and training. Unfortunately, this is not the case for about five percent of Pacific Fleet ships. Here, for example, we see a direct correlation between overhaul extensions and decreased readiness. Every two ships in overhaul lowers the percentage of combat ready ships by approximately one percent. Last year we lost 97.5 ship-operating months or essentially a full year's operation of a battle group because ships were extended. This problem, if not corrected, will adversely affect our combat ready forces in fiscal year 1982 because more ships begin overhaul about April. Similarly, late delivery of new construction ships drains manpower resources and reduces planned force levels. Late delivery of SSN's recently illustrates this point.

To assist in overhaul management, I am personally involved in minimizing unplanned work package growth which often occurs after an overhaul starts. We have also down-loaded our overloaded public shipyards by moving more combatant overhauls to private yards.

To keep our overhauls on track, civilian personnel ceilings in naval shipyards must be maintained and civilian personnel ceilings at the Supervisors of Shipbuilding, Conversion, and Repair should be increased to better supervise, plan, and manage increased private sector work. We need your support in this regard because experience has clearly demonstrated that quality assurance and timely completion cannot be assured without it.

Ammunition readiness

There are two main categories of ammunition, i.e., level-of-effort ordnance, and threat-oriented ordnance.

Level-of-effort ordnance is ammunition designed to neutralize that portion of an enemy order of battle which the enemy has an ability to regenerate rapidly. Ship gun and air-delivered gravity bombs are primary examples. Threat-oriented weapons such as air-to-air missiles, torpedoes, and mines are designed to neutralize equipment such as ships and aircraft which the enemy cannot regenerate rapidly. Current shortages of level-of-effort ordnance and threat-oriented weapons adversely impact our ability to fight.

Shortage of ordnance is both a readiness and sustainability problem. Funded procurement levels, prior to the fiscal year 1983 budget submission, were inadequate to keep pace with either growing inventory or training requirements.

To compensate for inventory shortages, we are cross-decking weapons between combatants, airlifting weapons requiring maintenance between forward areas and maintenance facilities in the United States to shorten the maintenance pipeline, curtailing training to conserve assets for combat use, and allocating new missiles under a burdensome priority system.

Material readiness

There are four areas of concern in this category; aviation repairables, equipment maintenance, real property maintenance, and inventory control.

Aviation repairable component support remains a problem in the Pacific. There is insufficient near term funding for procurement of additional spares. Moreover, a fiscal year 1982 shortfall in component reworks of $57 million (compared to a fiscal year 1981 shortfall of $24 million) reduces our ability to refurbish repairable components and place them back on the shelf available for issue. This will have a serious impact on fleet aircraft operational readiness in that more mission essential equipments will be down awaiting parts, more aircraft will not be mission capable/full mission capable, there will be an increase in work stoppage requisitions, and higher cannibalization rates will prevail. To accommodate shortages, we routinely cross-deck aviation repairable components between carriers, draw down stocks at CONUS air stations, and cannibalize aircraft training squadrons to ensure that deployers have required minimal levels of ready for issue assets available. All of these actions both divert technicians from their primary tasks and, of themselves, degrade readiness.

Overall repair part support, other than aviation repairable components, in the Western Pacific is improving, but at the expense of our Eastern Pacific forces.

Positive momentum in equipment maintenance through our Planned Maintenance System, or "PMS," has been achieved by closer attention to requirements. For example, our surface ships' PMS performance rate is now the highest in the history of the program and, for the entire fleet, accomplishment confidence factors and performance rates show positive trends.

Fiscal pressures have reversed a prior trend of improved maintenance of fleet shore bases and facilities. From a level of $203 million in fiscal year 1981, Pacific Fleet maintenance of real property (MRP) funding drops to $178 million in fiscal year 1982 and $152 million in fiscal year 1983. This drawdown has an immediate secondary readiness effect by accelerated deterioration of buildings, roads, runways, fuel tanks, and piers required to support training maintenance and logistic support of the fleet.

Weakened control of Navy material can directly impair the readiness of Naval forces. Recently, the Secretary of the Navy directed that management attention and resources be applied to physical inventory procedures and warehouse housekeeping functions to provide more effective repair parts management, therefore preventing losses. I fully support these initiatives.

WARFARE MISSION AREA READINESS

Up to this point I have discussed readiness in terms of data trends. At this point I would like to discuss some specific events arrayed within warfare mission areas which influence readiness but which are submerged within data I've previously presented.

STRATEGIC FORCE READINESS

On 1 October 1981 our last Polaris submarine was removed from Pacific strategic forces and is being converted to an SSN for the remainder of her useful service life. USS *Ohio* comes on line 1 October 1982 as the first operational Trident-class submarine and a significant increase in Pacific strategic deterrent posture.

INTERMEDIATE-RANGE NUCLEAR FORCES

Introduction of TLAM/N, the nuclear land attack version of Tomahawk, will significantly increase the Pacific Fleet's theater nuclear arsenal and provide the capability to strike land targets from survivable sea-based platforms in many regions of the world. Hence, the probability that the Soviets will elect a tactical nuclear option is reduced. Programs have been instituted to increase the Pacific Fleet's capabilities to counter and survive a tactical nuclear attack should the Soviets nevertheless opt to engage in a tactical nuclear war at sea.

TOMAHAWK CRUISE MISSILES

Initial Operational Capability for submarine-launched and surface ship-launched Tomahawks will soon arrive. In less than four years, we will have a significant number of conventional cruise missiles deployed in the Pacific Fleet. We are developing doctrine and employment tactics necessary to ensure full capability is available as growing numbers enter the fleet.

GENERAL PURPOSE FORCE READINESS

Force levels

Within the next five years, Pacific Fleet total battle force will grow to approximately 260 ships as our enhanced shipbuilding program comes to fruition. We have increased total battle force levels for the Pacific Fleet by five to 221 ships within the past year, but our significant change has been in quality, with new and more capable ships replacing older and less capable ones which were decommissioned.

Warfighting

The capability and readiness in major warfare mission areas—anti-air, anti-submarine, anti-surface, and strike warfare—have either held their own or improved during the past year for deployed units.

Tactical/training readiness

Our operational environment has changed during the past several years because of the Soviet Navy's growing power and assertiveness and our expanded Indian Ocean requirement which tended to tie our Navy to geographically fixed and predictable deployment patterns. We are reversing this trend to take advantage of the mobility of naval forces. We are also examining additional overseas homeporting options as an efficient method of maintaining peacetime forward deployment levels and contingency capability, even though overseas homeporting cannot substitute for the larger forces our analysis supports as wartime force level requirements.

PERSONNEL READINESS

Despite very positive factors in our personnel readiness, our reported readiness index will remain constant or only slightly improved over the next six months or so because we are also growing by two thousand additional career billets to meet requirements in new ships joining the fleet. This is a manageable situation since indicators are all in the right direction and hope for full recovery is now within our grasp if our present positive momentum can be maintained; today we are moving toward more, higher quality people in a better, larger fleet in sharp contrast to our desperate situation only two short years ago.

Those increasing numbers of skilled petty officers available to our fleet were brought about largely by compensation gains which you in Congress recognized as being absolutely essential to our national security. As a result, officer and enlisted retention has improved across the board. Your support in this vital area has not gone unnoticed by American bluejackets and, on behalf of each and every one of the officers, sailors, and marines in the Pacific Fleet, I extend heartfelt thanks.

While improved pay and career sea pay have been heavily influencing factors in reducing our drain of talent, equally important has been the Chief of Naval Operations' emphasis on pride and professionalism in our Navy. Our sailors today are proud to serve in a professional outfit, again respected at home and abroad for its ability to perform when called upon in both military and humanitarian missions.

SUSTAINABILITY

Within the Pacific Fleet we view sustainability as the ability to conduct combat operations over a period of time against our most probable opponent. We therefore take a broad view of this term, equating it with all of the factors I have already covered in my statement. When we are operating with shortages of personnel, ordnance, and spare parts such that we are required to take extraordinary measures to shift these assets from Eastern Pacific forces to our deployed forces to optimize the readiness of the latter—and despite the shift are still not even filling up those deployed units with people, ordnance, and spares—sustainability issues become merged with readiness issues.

PACE AND DIRECTION OF IMPROVEMENTS IN FORCE STRUCTURE, READINESS, AND SUSTAINABILITY

Throughout my statement I have inserted those initiatives which are underway within the Pacific Fleet aimed at enhancing our force structure, readiness, and sustainability. I hope that I have conveyed to you the sense of urgency that exists within the fleet to do everything within our power to recover our maritime superiority as quickly as possible while managing our resources carefully.

From my perspective as Commander in Chief U.S. Pacific Fleet, my current priorities to restore maritime superiority have shifted to: maintain personnel readiness momentum, equipment readiness, sustainability, and force level expansion.

This relative listing stems from the fact that personnel readiness—numbers, quality and training of our people—underlies all other factors in our ability to wage successful combat if called upon to do so. Here we appear to have reversed the alarmingly declining retention trends of past years. As for quality, we are also on an upswing—with better spirit than seen in a long time and a honing of tactical warfighting skills oriented toward the way in which we would actually fight. The momentum is there and it must be maintained.

Equipment readiness and sustainability factors, which merge as a result of our shortages, force us to take from Eastern Pacific forces to support deployed forces in the Western Pacific and Indian Oceans. This results in a potentially dangerous masking of our true warfighting capability since playing musical chairs with scarce assets can apparently raise readiness indices of selected forces while there is, in reality, no increase in total assets or warfighting readiness. Even with this shuffling of resources, our deployed units have unfilled ordnance and repair parts requirements.

This lack of readiness and sustainability is the determining factor which takes our overall net assessment against the Soviet Pacific Fleet from a margin of confidence in battle to the margin of uncertainty. Our net assessment analysis indicates that we can win a battle in a high threat environment with those asset capabilities we now possess. But, that same net assessment changes to a toss-up for the battle—as well as the war—when the readiness and sustainability factors are inserted into the equations. It also indicates that additional force levels are required to conduct simultaneous combat operations in all our major areas of interest; i.e., Northwest Pacific, Southeast Asia, and Indian Ocean. This capability is required to best assure the successful accomplishment of our assigned missions.

The fiscal year 1982 authorizations and the fiscal year 1983 budget submission, with the five year program, are in the right direction. Last year we were moving negatively through a gray zone of uncertainty as to whether we would prevail. This year the indicators are stabilizing within that zone. We now have hope. We can now see the way out, contingent upon the actual accomplishment of the five year program.

Our ultimate goal is maritime superiority for our island nation, dependent upon the free use of the seas. In the Pacific, we have long had clear, undisputed maritime superiority—which has done so much since World War II to maintain peace and protect vital interests. As a result, the Pacific nations have grown to become our nation's largest trading partners. Today, we no longer have that clear maritime superiority and assurance that we can defend our economic lifelines, freedom of the seas, and our way of life. Our mission by law requires the capability to conduct prompt and sustained combat operations whenever called upon in support of national policy. Only by regaining clear, undisputed maritime superiority can we hope to deter others who aim to deprive us of those vital interests.

Deterrence of armed conflict by being strong enough to prevail if deterrence fails is the one goal that is constantly in the forefront of all that we do in the Pacific Fleet.

Thank you very much.

Senator HUMPHREY. Thank you, Admiral Watkins.

General Davis?

STATEMENT OF LT. GEN. JOHN DAVIS, COMMANDING GENERAL, FLEET MARINE FORCE, PACIFIC

General DAVIS. Thank you, Mr. Chairman.

I am pleased to be able to testify today on the readiness of the Fleet Marine Corps Pacific, and I would like to say at the outset that in my judgment the fleet marine force has a chance in combat, is combat-ready. That is not to say that we don't have some problems, and I have enumerated in my statement certain concerns and problems in greater detail.

Just to refresh you, the Fleet Marine Corps Pacific consists of force headquarters located in Hawaii. We have two Marine Amphibious Forces, one in California and one in the West Pacific, in Okinawa, and a Marine brigade in Hawaii. I have a little over 71,000 Marines and a little over 2,000 sailors in Fleet Marine Force Pacific, which equates to essentially two-thirds of the combat strength of the Marine Corps.

To refresh you on the mission, my mission is to provide fully organized, trained, and equipped Marine air ground task force to the fleet commander, Admiral Watkins, for prosecution of sea campaigns, and then be prepared to carry out any such other duties as the President may direct.

I think, based on last year's report by my predecessor, that I can tell you that we have made progress in almost all areas of readiness since the last report to this committee, in readiness and sustainability. Many of these improvements are the result of initiatives that have been undertaken by the Commandant, and I would hope that some of the improvements are as a result of the efforts of my staff, in which their direction has been to spend more time trying to solve problems that we have now and quit dreaming about how we are going to do things in the future.

We have rigorously pursued a strong aviation safety program, and in the past 6 months have reduced our accident rate by 200 percent. In other words, a 200-percent improvement in the rate, which was needed. We are able to continue that progress in the first 2 months of this year.

During the visits to all of my command, I would just like to give you some insight on my observations. I have been very pleased with the dedication and professionalism of all of my commanders from platoon leaders on up to commanding generals, and with our officer corps as a whole. I have been most impressed with the caliber of the young Marines that I have had the opportunity to observe and speak with. Their spirit, their fitness, and their enthusiasm make me feel good, and I think it would you, too.

The morale of the force, I think, is high, and I am confident that the entire force is both deployable and ready to fight as you would expect Marines to be able to fight.

I would like to thank you and the committee for your support. It is appreciated by me and by my Marines.

I would be prepared to answer any detailed questions on the concerns that I have in my statement.

[The prepared statement of General Davis follows:]

PREPARED STATEMENT OF GEN. JOHN K. DAVIS, COMMANDING GENERAL, FLEET MARINE FORCE, PACIFIC

Mr. Chairman, distinguished members of the committee, it is a great honor and a pleasure for me to be asked here today to testify on the readiness of Fleet Marine Force, Pacific. I judge my command to be substantially combat ready. However, there are problems that remain to be solved and I welcome this opportunity to make you aware of our current status and the direction we are going. The Commandant of the Marine Corps addressed numerous ongoing solutions to our short and long term deficiencies. I will concentrate on what we are doing today in the Pacific command to provide ready Marine forces.

FORCES

Fleet Marine Force, Pacific (FMFPac) consists of the Force Headquarters, two Marine amphibious forces (MAFs) and a Marine brigade, nearly two thirds of the total Fleet Marine Forces. III MAF in the western Pacific, under the operational control of the Commander, 7th Fleet, consists of a MAF headquarters, the 3d Marine Division, the 1st Marine Aircraft Wing and the 3d Force Service Support Group. I MAF in the eastern Pacific, under the command of the Commanding General, FMFPac, consists of a MAF headquarters, the 1st Marine Division, the 3d Marine Aircraft Wing, the 1st Force Service Support Group and the 7th Marine Amphibious Brigade (MAG) headquarters (nucleus). The 1st Marine Brigade in Hawaii, under the command of the Commanding General, FMFPac, consists of a brigade headquarters, the 3d Marine Regiment, Marine Aircraft Group 24 and a Brigade Service Support Group.

MISSION ASSIGNMENTS

My mission is to provide fully organized, trained and equipped Marine air-ground task forces to the Pacific Fleet Commander for use in naval campaigns. In addition, we must be prepared to perform such other duties as the President may direct.

Specific tasks include: Provision of peacetime presence forces ashore and afloat, provision of Marine air-ground task forces embarked aboard amphibious task forces for sea control, seizure of critical choke points or large scale amphibious assaults against heavily defended areas and emergency support for disaster relief or evacuation operations.

All of these tasks are embodied in a wide variety of contingency plans including [deleted].

READINESS ASSESSMENT

In each of these mission areas and tasks, I believe my combat units are ready. Aircraft squadrons and ground combat battalions that are deployed or preparing to deploy are C-1 or C-2, fully combat ready, or substantially combat ready respectively by the Joint Chiefs of Staff Unit Status and Identify Report (UNITREP) standards. My combat service support units, even though they are degraded by UNITREP standards at present, have the capability to produce fully combat ready detachments to support Marine air-ground task forces of Marine amphibious unit and Marine amphibious brigade size. We maintain an array of task organized units ready for immediate contingency deployment. The 31st Marine Amphibious Unit (MAU) in the western Pacific is fully combat ready, constantly assigned to amphibious shipping and maintains a [deleted] ready to sail posture. The 17th MAU in the eastern Pacific is constantly identified, capable of deploying fully combat ready and maintains a [deleted] ready to load posture. Air contingency battalions are held in readiness in both the eastern and western Pacific to respond to contingencies by strategic airlift. The western Pacific air contingency battalion has a forward command group and its first company on [deleted] alert and the remainder of the battalion on [deleted] alert. The eastern Pacific air contingency battalion is on [deleted] alert. In the western Pacific, we maintain a ready battalion landing team on [deleted] alert. The 7th MAB is constantly identified to deploy fully combat ready forces from southern California. They are on [deleted] alert to move by strategic airlift. The 7th MAB is operationally ready for combat after air transit to the objective area and marry up with equipment and supplies embarked aboard Near Term Prepositioned Ships. Although not on alert, III MAF in the western Pacific is capable of deploying fully combat ready forces of up to MAB size contingent upon the provision of strategic lift. [Deleted.]

COMBAT SUSTAINABILITY

As is the case with personnel and equipment readiness, the sustainability of Fleet Marine Force, Pacific varies with the size of the commitment. I assess my combat service support units and my backup supplies as adequate to support commitment of combat units up to a Marine amphibious brigade from each of my MAFs. Beyond the MAB level, shortages in key units and commodity areas have an increasingly severe impact. [Deleted.]

OUTSTANDING REQUIREMENTS

The readiness and sustainability of the Pacific Fleet Marine Forces are improving and current manpower, firepower and sustainability initiatives undertaken by the Commandant of the Marine Corps promise to increase the size and effectiveness of the fully combat ready forces available for commitment. At the bottom line, it is not forces available but forces delivered and sustained that make the difference in a contingency.

I consider strategic lift, amphibious and air, as my most serious Force degrading issue. Currently, there are 34 amphibious ships of various types in PACOM, three of which are in the Naval Reserve force. Current amphibious ship force levels in PACOM are inadequate to support our routine peacetime deployments. Amphibious ship squadrons deploying to the western Pacific, consist of five or six ships, which are insufficient to embark the MAU and battalion landing team required by current Commander in Chief, Pacific Fleet (CINCPACFLT) standing operations orders. The remaining amphibious ships in the eastern Pacific, including Naval Reserve assets and ships in overhaul, are insufficient to lift a MAB without substantial Military Sealift Command augmentation. We urgently need additional active amphibious ships. Turning to airlift, availability of national strategic airlift assets in a large scale crisis situation is a matter of concern to me. We presently depend heavily on these assets for all contingency plans. The difficulty we experience in flowing our contingency plan forces using strategic lift resources indicates that substantial ready forces may be committed piecemeal because of shortages of lift.

My second issue of concern is manpower. In this area, I am happy to report we are showing improvement. Retention within the Force was well over goal in fiscal year 1981 and we are on target with a slightly higher goal in the first quarter of fiscal year 1982. We presently have 71,133 Marines in Fleet Marine Force, Pacific which represents an increase of roughly 800 Marines during the past year. Over 600 of these additional Marines have gone to units in the service support groups. Included in the service support group restoration effort is the activation of cadred units. So far, during fiscal year 1982, we have activated 8 companies, with an additional company scheduled for activation later this year. As manning continues to increase, our combat service support should increase both its array of capabilities and its depth within each capability. The most serious problem with this program continues to be a shortage of technically qualified officers and senior enlisted.

My third major area of concern is sustainability. The positive direction of recent actions to flesh out combat service support units improves our capability to sustain forces in the objective area. The strategic lift problems noted earlier cause initial combat forces to be sized to fit constrained lift, usually by sacrificing accompanying supply levels. Lack of dedicated follow-on lift to move supply stocks stored in the continental United States to using units committed overseas [deleted].

We have several ongoing programs to minimize the problems of getting supplies to a combat theater. The Near Term Pre-positioned Ship program is our most mobile and flexible approach and has substantially enhanced our capability to deliver forces in those cases where ports and airhead facilities are available and usable. Pre-positioning ashore with our operating forces in the Far East gets the supplies in theater but still generates a heavy requirement for scarce in-theater lift. Our Landing Force Operational Reserve Material (LFORM) program, which pre-loads ammunition and supplies aboard amphibious ships, saves us time in responding to a contingency but does not increase the quantity ultimately delivered with the assault echelon. War reserve material to fill unit deficiencies and support the Force once committed is sufficient to support commitments [deleted].

My fourth area of concern is precision munitions. Numbers of precision high lethality anti-armor, ground-to-air and air-to-air munitions may be the critical path which determines the success of our Marines against modern threat forces. These items are programmed for procurement and quantities are increasing, [deleted].

Finally, I am concerned about my command, control and communications. This is the ingredient we depend on to provide flexibility and a competitive edge against numerically superior forces. Our command, control and communications are degraded at present by lack of sufficient circuits aboard amphibious ships, lack of total secure voice capabilities throughout the Force and lack of modern supportable long range, high frequency and multi-channel communications. High skill personnel shortages impact on command, control and communications readiness.

PRUDENT RISK REQUIREMENTS

From my viewpoint at the operational level, risk must be calculated based upon the scope of the commitment, the threat at the time of commitment tempered by the probable intentions of the enemy as well as the resources (such as lift, forces, etc.) actually available. I believe that our lift shortfalls, especially amphibious lift, [deleted] requiring more than a MAB. We need amphibious shipping which is capable of lifting one of my two MAFs in order to handle present contingency plans [deleted]. Such a capability could accomodate a simultaneous two MAB requirement. Sufficient amphibious lift capability would provide the requisite numbers, given the normal fifteen percent in upkeep, to adequately handle our routine peacetime forward deployment and training requirements.

As noted earlier, our stocks of air-to-air missiles, ground-to-air missiles and anti-armor munitions are critically short. Considering the threat, even in third world countries, I believe a protected [deleted] supply of these munitions is an imperative for prudent risk.

Given overall improvements in lift and precision munitions it would be possible to employ larger forces within considerably shorter response times and with greater initiative, at which time, improvements in our manpower, general sustainability and communications would become crucial to mission accomplishment. Right now, in my judgment, forces and supplies can be readied for deployment faster than we can deliver them. Risk is tied largely to selection of an objective area where enemy reaction times preclude defeat in detail as our capability ashore builds.

PACE AND DIRECTION OF IMPROVEMENTS

I am truly heartened by the structure readiness and sustainability improvements programmed over the last couple of years which are now nearing fruition.

In force structure, we are activating combat service support units, which were previously in cadre, to give us a full range of capabilities. Additional manpower being provided by the Commandant of the Marine Corps will allow us to flesh out many of our under strength units. Changes to the infantry battalions and the firepower additions planned for them will substantially increase the impact of each unit on the battlefield. Our artillery units will shortly receive the M198 howitzer which will increase range and lethality of the fire support provided to our maneuver units. I must add, however, that this increased capability and firepower will require increased lift for assault forces as well as follow-on supplies and will make our near term strategic lift shortages even more acute.

In aviation, the introduction of F/A-18 fighter attack aircraft, CH-53E heavy lift helicopters and AV-8B vertical short take-off and landing aircraft will increase our combat capabilities as well as ameliorate the problems in maintenance man hours and parts supplies associated with our present aging aircraft inventory.

The relatively large number of new and improved equipment being introduced throughout the Force in weapons, communications and vehicles should ease our problems in ground equipment readiness, particularly man hours and parts supply.

Current programs to refine our war reserve requirements together with the Commandant of the Marine Corps plans to fund for deficiencies should make possible steady progress toward our sustainability goals.

In summary, Fleet Marine Force, Pacific is ready to deploy fully combat ready Marine air-ground task forces in support of contingency plans throughout the PACOM area and in support of other commanders as required. Initial forces are capable of response on extremely short notice and I am confident that the entire Force is both deployable and ready to fight with the skill and tenacity traditionally associated with Marines. The speed with which these forces can close an objective area, and their flexibility and staying power once committed can be improved and is being improved. Your continued support for my Marines is earnestly appreciated.

Thank you.

Senator **Humphrey**. Thank you, General Davis. General Schwenk.

STATEMENT OF LT. GEN. A. G. SCHWENK, COMMANDING GENERAL, FLEET MARINE FORCE, ATLANTIC

General **Schwenk**. Mr. Chairman, I welcome the opportunity to report to you again on the preparedness of Fleet Marine Force, Atlantic. I would like to make a brief, and I mean brief, summation of my written statement which has been provided to the subcommittee.

The overall readiness of my command has increased markedly over the past year. We have increased the percentage of on-board personnel strength, and have begun to flesh out some of the cadred units of the force service support group. Of equal importance, our 1981 budget was $31 million higher than the 1980 budget. As a result, we have restocked our shelves. We have, for all intents and purposes, eliminated our table of equipment deficiencies, and we have practically eliminated our backlog of equipment maintenance.

FORCE MODERNIZATION

In addition, we are beginning to see some modernization of the force. One squadron of CH-53 Echo helicopters has been activated and has all its aircraft. The introduction of the M-198, the 155-millimeter towed howitzer is underway. I feel more confident than ever about the force. Leadership, morale, and esprit are the highest I have ever seen them.

We are conducting realistic training in many areas of the world. Today, in fact, we have a Marine amphibious unit in northern Norway, in addition to the one in the Mediterranean Sea. My tank battalion is at Camp Pickett, Va., where it can maneuver and shoot more freely than it can at Camp Lejeune. The artillery regiment, the entire regiment is at Fort Bragg, N.C., where it can shoot with far less restrictions than at Camp Lejeune.

There are two squadrons getting air-to-air training working out of the naval air station at Roosevelt Roads, Puerto Rico. Additionally, there are significant exercises coming up in the near future which will further enhance our readiness, but which I am not at liberty to discuss in this session.

FORCE READINESS

Mr. Chairman, we are indeed a force in readiness, but once again I must report that in spite of our readiness, I question our ability to get to the fight if there ever is one. The shortage of strategic mobility, air and sea lift, is of major concern. Admiral Train on any given day can only lift about one-third of my force in amphibious assault shipping. I fully support the Secretary of the Navy, the Chief of Naval Operations, the Commandant, Admiral Train, anyone else, when they say the minimum amphibious ship requirement is to lift simultaneously the assault echelon of a Marine amphibious force and a Marine amphibious brigade.

The almost nonexistent naval gunfire support is also of concern. When we land, we are unsupported except for the naval gunfire and air support provided from the sea. I encourage all Navy initiatives to increase this capability, and congressional support in funding.

My written report, as General Davis said, covers these areas and others in more detail.

Again, I thank you for the opportunity to be here, and I am prepared to answer any questions you may have.

[The prepared statement of General Schwenk follows:]

PREPARED STATEMENT OF LT. GEN. A. G. SCHWENK, COMMANDING GENERAL, FLEET MARINE FORCE, ATLANTIC

Mr. Chairman, distinguished members of the committee, again, it is an honor for me to discuss with you the readiness of Fleet Marine Force, Atlantic (FMFLANT). My purpose today is to provide you a candid assessment of my total Force capability to carry out our assigned mission. I will discuss our current posture, major constraints, what we are doing to overcome them, and what, I believe, is required from outside the Force to enhance our readiness, get us to the fight, and sustain us once we're there.

I would sum up our mission in one line to say "It is to provide combat ready amphibious landing forces to serve with the Fleets", and I would emphasize Fleets in the plural. We provide forces to the Second, Sixth, and Seventh Fleets, as well as the Striking Fleet Atlantic.

As you know, the tactical arm of my Force is II Marine Amphibious Force (II MAF). It is composed of the Second Marine Division, Second Marine Aircraft Wing and Second Force Service Support Group, located in North and South Carolina, and my Headquarters in Norfolk, Virginia.

When employed operationally for combat, contingencies, or exercises, Marine forces are normally organized from elements of these major commands and tailored to perform the mission assigned. We call this task organization a Marine Air Ground Task Force, or MAGTF. All MAGTF's, regardless of size, have four things in common: They have a headquarters element, a ground combat element, an aviation combat element, and a combat service support element.

During the past year, FMFLANT forces have gone to Norway, Denmark, the Mediterranean Sea, the Indian Ocean, Africa, the Caribbean, and Central and South America in response to our mission. We conducted many battalion and squadron size training deployments away from home last year to gain essential training/experience in jungle, desert, mountain and cold weather environments. Additionally, we participated in several major exercises for which the scenario was designed to closely resemble wartime taskings. All of these things were squeezed into already busy training schedules at home which are required to maintain readiness in individual and small unit combat skills.

We provide infantry battalions, aircraft squadrons and detachments to the Western Pacific as part of the Marine Corps Unit Deployment Program, and, from time to time, aircraft units to the Atlantic and Pacific fleets to augment the air wings on U.S. aircraft carriers.

Our most important standing commitment is to maintain a Marine Amphibious Unit (MAU), the smallest of the MAGTF's, in the Mediterranean as the Sixth Fleet's landing force. This unit spends a portion of each deployment in the Indian Ocean and, last December, participated in Exercise Bright Star—82 by landing in Oman. While providing a ready U.S. amphibious presence in the Mediterranean, this unit's fundamental mission, it is capable of providing disaster relief assistance, evacuating U.S. citizens, and limited combat operations. This MAU maintains a high degree of readiness by conducting a series of unilateral, bilateral and NATO amphibious training exercises throughout the Mediterranean area.

Our primary contingency commitment is the Airlift Alert Force. We maintain one reinforced infantry battalion at Camp Lejeune, North Carolina on constant alert for airlift to contingency areas worldwide. It is capable of performing limited combat, evacuation of U.S. citizens, and civil disturbance operations.

Now, how ready is FMFLANT? In Joint Chiefs of Staff/Office of the Secretary of Defense (JCS/OSD) terms, we are substantially combat ready. And that readiness rating is not just in personnel, but in all indicators; supply, equipment, maintenance, training, sustainability and even higher in such immeasurable things as morale, esprit, quality, leadership and dedication. However, readiness is more than that. In my view, overall readiness of my forces for initial deployment for combat is a product of the balance obtained by allocating funds to the competing requirements for manpower, modernization items, operations and maintenance, consumables and training. Yet another balance must be reached between funds which produce readiness for immediate response and funds to sustain forces in combat over time. Even with the improved funding levels of last year, we must still develop tradeoffs among the competing requirements.

I'd like to discuss some of the major factors which make up our overall readiness. First is manpower, the most critical element of combat readiness. Our effectiveness in a crisis is largely dependent on the individual Marine and his leadership, discipline and training. I currently have assigned most of my required Marines. However, rank and occupational specialty imbalances reduce the overall readiness status. These imbalances which degrade our personnel readiness are of concern. I speak primarily of a shortage of mid-level leadership (NCO's & SNCO's) across the board and shortages in highly skilled technical fields such as aircraft, data communication and electronics maintenance personnel; intelligence specialists and other technicians. These shortages have resulted from our past inability to retain these personnel in the Marine Corps and the long lead time required to train their replacements. Retention of these and the rest of our good Marines has been and will continue to be given the highest priority. We are doing a much better job of this than before. Your support of the increases in pay and reenlistment incentive programs has been a significant contribution. We continually refine the Selective Reenlistment Program by applying bonuses to the specialties we need most. These programs are very effective. We are now retaining more quality Marines in our critically short fields and have made substantial progress in closing the gap on our career enlisted force requirements. As a result, the personnel situation has improved since I reported to you last year. During the past fiscal year, FMFLANT reenlisted more Marines than ever and we exceeded our retention goal by 29 percent. This year we have increased that goal and the first quarter results indicate we should reach it as well.

Our current manpower strength allows us to continue to man our forward deployed units at a high level of personnel readiness. We continue to give staffing priority to the combat and combat support units. Combat service support continues to be enhanced by the activation of all cadred units within our combat service support element. This activation, scheduled to continue through fiscal year 1983, will significantly increase our ability to go anywhere, at anytime and sustain ourselves for longer periods.

The second ingredient to overall Force readiness I'd like to discuss is that of ground materiel readiness/modernization. We actively pursue a program of maintenance and repair to ensure that our-on hand equipment is kept in serviceable operating condition. Most of our major ground weapons systems such as tanks, self-propelled artillery and amphibian assault vehicles, are fully combat ready. Other mission essential equipment throughout the Force averaged high availability throughout 1981. Funding to support this effort was adequate throughout fiscal year 1981 and is believed adequate for fiscal year 1982. In fact, new maintenance initiatives such as the depot rebuild of crew-served weapons and engineer equipment are expected to improve the readiness of these items during fiscal year 1982.

Motor transport readiness has steadily improved over the past year due in large part to the fielding of M809 series 5 ton cargo trucks. In addition, the M939 series 5 ton cargo trucks will replace the entire aging fleet of 2½ and 5 ton cargo trucks by calendar year 1984, completing a major modernization program.

Readiness of engineer equipment has also improved over the last year, but several areas still require attention. We need to improve our ability to produce and distribute potable water. We also need to increase our bulk fuel storage capability and our ability to effectively distribute fuel over longer distances. We do not have modern assault bridging to rapidly breach a gap. Our bridging assets are old and time-consuming to erect. Our minefield breaching equipment is old and should be modernized. We have no mechanical means to rapidly emplace large, permanent type, minefields. The Marine Corps has initiated programs and procurement action to effect required modernization, but it will be some time before modernization of our engineer equipment is complete.

II MAF ground weapons systems are in good shape and will get better due to current modernization and replacement programs. The service rifle and several machine guns are scheduled for upgrade beginning in April of this year. Fielding of the M198 155mm howitzer has commenced and when completed during fiscal year 1982, will provide increased fire support capability. However, ammunition availability is a major concern. The high cost and limited quantities of antitank missiles (TOW and Dragon), and ground to air missiles (I Hawk, Stinger and Redeye) prohibit firing as much as I would like.

Turning now to some general improvements, we have continued to upgrade our ability to operate in cold weather. To date we have attained most of the MAF's required individual clothing and equipment for cold weather operations. This procurement will continue until we can outfit the entire force.

Also, we have been authorized a higher and more realistic level of medical supplies and equipment which is adequate to support the entire MAF initially in a high intensity environment. By the end of this fiscal year, the medical inventory will have increased from $3.5 million in 1980 to approximately $11 million dollars. An additional $7 million, required next year, will complete the revised medical allowance purchase.

There are enough dental officers assigned to II MAF to give full dental support to current Marine Corps manning levels. Upon mobilization, dental personnel currently assigned to Naval Regional Dental Centers will join the 2d Dental Battalion to bring it to required wartime strength. The field dental equipment (Authorized Dental Allowance List) is virtually 100 percent except for 56 dental chairs and lights which are programmed for delivery in the summer of 1982.

Similar to the dental officer situation, peacetime medical personnel support is based on filling less than wartime strength allowances. Most of the other doctors and corpsmen who are needed for contingency operations are stationed at various hospitals, subject to assignment to us on short notice.

I want to mention one problem in providing medical support to my combat forces. Amphibious operations in a high intensity environment will involve large numbers of casualties requiring immediate treatment and surgery. Under most contingency scenarios, the bed capacities and surgical capabilities in the Amphibious Task Force and Marine units would be overwhelmed early in the engagement. To correct this deficiency, it is considered imperative that a hospital ship, or ships, be available to support the amphibious landing. Later, as combat units advance, additional medical support is required and could be provided in the form of Fleet Hospitals. Unfortunately, neither of these capabilities is available today.

To this point I have not discussed our aviation posture. During this past year FMFLANT has maintained it's assigned aircraft while increasing it's overall combat capabilities through employment of new and upgraded weapons systems, such as the CH-53E, F-4S, A-6E TRAM, and AH-1T(TOW). Additionally, new systems scheduled for introduction (F/A-18 and AV-8B) will add even greater capabilities as they replace older aircraft. Our biggest challenge with the introduction of these new and upgraded weapons systems is the recurring task of formulating and procuring the support requirements to keep these weapons combat ready. Herein lies one of the principle hurdles to sustaining readiness.

All too often in our quest to procure the required types and numbers of aircraft, the support necessary to keep those aircraft fully capable and combat sustainable is slow in developing. When it comes to a competition for funds, it is primarily a two-fold problem: one, high visibility procurement of a sophisticated aircraft usually suppresses the equally vital, but low visibility funding for spares and other less glamorous support requirements, and two, developing usage data to support the outlay of funds for spares and support equipment requires several years.

The shortage of air-to-air missiles continues to hamper training and readiness, particularly the medium range Sparrow missile. Production has not kept pace with requirements, which include training as well as war reserve materiel.

With exception of laser guided bombs and 5.0" rockets, the current inventory of conventional air-to-ground weapons is considered adequate. Many of these weapons, however, are antiquated, are inaccurate, and reduce aircraft survivability when faced with the modern threat. We are looking forward to development of a new family of stand-off weaponry for both air-to-air and air-to-ground. Aircraft survivability depends upon technology and funds being available to produce these weapons.

As you know, the O&M appropriation provides my main support, but it cannot be considered in isolation. We are dependent upon a resource balance between competing appropriations, the aggregate of which is necessary to ensure current force capability and future sustainability; procurement (to eliminate ammunition deficiencies and modernize the Force); military personnel, (to man the force); and military construction (to house and provide work spaces); appropriations over which I, as a Force Commander, have little influence. However, I am encouraged with the growth in our O&M,MC assets in the current and projected programs. You have provided the funds which have enabled us to eliminate all maintenance of equipment and virtually all high priority T/E deficiencies. This has been accomplished through internal emphasis on deficiency identification and control, continued insistence on executing a balanced (between training/readiness objectives and materiel readiness) program, and the positive application of the increases in resource availability. I am determined to ensure that the gains experienced in these areas (of deficiency elimination) are sustained. This requires a close watch on OPTEMPO and training in order to preserve the balance. I should point out however, that time and continued resource growth is required to offset the constraints experienced in the mid and late 1970's (during these years negative growth in our O&M,MC appropriation was recorded in 5 years from Fiscal 1975 through Fiscal 1979). Future increases in our O&M fund authorizations must keep pace with escalating costs; realistic inflation factors must be applied to future budget projections.

In addition to the gains addressed above, our unit deployment requirements are stabilizing due primarily to the Commandant's initiatives in establishing flat rate per diem entitlements and centralized accounting, and accurate identification of airlift requirements to support this program. Materiel deficiencies continue to accrue, but they are identifiable and manageable.

We find that we must travel in order to provide for realistic training to improve readiness. For example, Camp Lejeune, N.C., is not the ideal place to conduct cold weather or desert training. Therefore, a large tactical airlift and travel requirement exists if we are to continue this realistic training and exercise participation. We must also fund the continuing increases in MAC tariff rates, (21 percent in fiscal year 1982). I enforce positive control of travel through the approval process; however, reduction of travel will ultimately degrade our ability to meet our training commitments and will have a direct impact on our readiness.

Recent legislative and regulatory changes have presented new travel challenges—DOPMA per diem equity coupled with strict interpretation of field duty definitions provides that members participating in unit training exercises may be in a per diem status, to include the meal portion entitlement. This situation will not only require additional funding but also the strict accountability of entitlements and the provision for meal collection procedures, (under unit training exercise conditions).

Notwithstanding areas of concern and factors which reduce or inhibit the attainment of optimum readiness, I believe current programs initiated by the Commandant of the Marine Corps and funded by the Congress will do much to alleviate our shortages and modernize our weapons, equipment and aircraft. In these areas, we are making steady improvement.

I cannot report with like optimism, however, on the ability of my Force to rapidly deploy to any contingency world-wide. My forces are substantially ready for commitment to combat, but Admiral TRAIN has been provided only enough amphibious ships to lift a portion of my total Force on a given day. It is the combination of Marines and amphibious ships and sailors which results in the unique capability to forcibly project U.S. power into a contingency area without reliance on overflight and base rights and staging areas. This ability distinguishes amphibious forces from all other forces. But our capability is limited by the funds provided the Navy to build and operate amphibious ships. Current ship-building programs will only replace the lift capability of amphibious ships being phased out of service. In short, the Navy's amphibious lift capability will remain about the same as it is now for as far down the line as we can see. Therefore, we believe it is critical to build up the amphibious Fleet to be able to lift the assault echelon of a MAF plus a MAB, to provide a forcible entry capability.

Related to this, we are also interested in the development of new techniques to provide for faster, more flexible movement of sustaining supplies and logistic materiel into an area of operations. We monitor and have participated in the Amphibious Logistics System (ALS) and the development of Logistics Over The Shore (LOTS) which will enhance our capabilities to enter a bare beach environment. Tied with this development is the Navy's exploration of new lighters and self sustaining facilities for operating in under-developed areas of the world. In this area we have already commenced delivery of specialized material handling equipment (30 Ton Drott Crane, Light Amphib Cargo Handlers). We must avoid being tied to established ports for debarkation.

I am particularly pleased and encouraged by the continuing development of the Landing Craft, Air Cushion, or LCAC. The LCAC will provide us, for the first time, a truly high-speed, heavy-lift surface delivery vehicle, which will greatly expand our flexibility and options for conducting amphibious operations. Used in combination with helicopter delivery of assault forces, the LCAC will give us the capability to conduct forcible entries from over the horizon, vastly complicating the enemy's defense problem by not knowing the landing site until virtually the last few minutes before H-hour. The possibilities we see for use of the LCAC are exciting, and could alter some of our conventional concepts for conducting amphibious operations. Because I view this revolutionary vehicle as a particularly valuable addition to our amphibious arsenal, I am concerned that the program for acquiring the LCAC be fully funded, so that we may receive them at the earliest possible time.

Related to the shortage of amphibious ships is the shortage of naval gunfire support. When we land, we land unsupported except for that which comes from the sea; be it surface gunfire or air support. Getting us to the objective area, landing us, supporting us initially is the responsibility of the Commander of the Amphibious Task Force, the Naval commander; until the Commander of the Landing Force, the Marine commander, is established ashore. This is the most critical period in an amphibious assault. To support my Force in an opposed landing, I would require several ships just to hold my own for the first day or two. As you may know, ships with major caliber guns do not exist, and there are so few ships with smaller guns that, during a major war, they likely would be engaged in other tasks such as anti-submarine or anti-air warfare operations. Accordingly, we support all initiatives by the Navy to increase the currently almost non-existent naval gunfire support capability.

Other factors affecting the readiness of my Force to a somewhat less critical degree are: the need for more precision guided munitions of all types and improved aircraft navigation systems; the need for across-the-board improvements and purchase of specialized equipment which will allow the force to survive, fight, and win on the nuclear or chemical battlefield; and, the need for new and upgraded communications equipment capable of operating effectively in an increasingly sophisticated enemy electronic warfare environment.

In summary, Fleet Marine Force, Atlantic is as ready for commitment in furtherance of U.S. policy as I can make it with the assets I've been given. Personnel shortages are on the mend, Marine Corps initiatives for modernization are encouraging, funding support by the Congress is gratifying, but the shortage of amphibious shipping and naval gunfire remain pervasive and yet unresolved issues.

That concludes my statement. I am prepared to answer your questions. Thank you.

Senator Humphrey. Thank you, General Schwenk. I would begin by asking each of you to assess what the effect would be on your command of any cuts in the 1983 O. & M.N. account. Admiral Train?

OPERATION AND MAINTENANCE FUNDING CUTS

Admiral Train. Cuts in operation and maintenance funding cannot help but have a direct impact on readiness. Any cut that you take in that funding would have to be evaluated in that light. That is not to say that we don't have some flexibility. We are well aware that O. & M.N. funding is a prime candidate for cutting, because you take the full savings in terms of expenditures in the years you take the cut. Cuts in other programs such as the SCN program or aircraft procurement program or weapons procurement program don't pay off as handsomely as O. & M.N. cuts in the year that you take them, and therefore are less of a target for reductions in expenditures in a specific year.

Obviously, there is going to have to be a tradeoff if the committees of Congress believe that the budget must be cut. It is going to be very difficult for us to say that we can't cut O. & M.N., we must cut some place else. Somehow, there is going to have to be a balance. We are going to have to find the balance between O. & M.N. cuts and procurement cuts. I would hope, however, Mr. Chairman, that we don't find ourselves confronted with an either/or situation where we either cut O. & M.N. or cut something else. O. & M.N. cuts do hurt. We can survive. But you are directly impacting on readiness, and it is important that you understand that.

Senator Humphrey. I do understand that, and that is why I asked the question. I am not advocating such cuts. I am hoping to build a record in this hearing and others to forestall such cuts. Perhaps I should have said that at the outset.

Admiral **Train**. Thank you, sir.

Senator **Humphrey**. Can you give us some practical examples of the effect on your command if O. & M. were to be cut? I note that we made some progress in readiness this last year, thanks to somewhat increased O. & M. appropriations as well as personnel benefits. Can you give us some practical examples of the effect you would suffer?

INDIAN OCEAN FORCES

Admiral **Train**. Yes, sir. We have some specific commitments where we have no management room. Examples are the commitments to maintain a certain level of peacetime presence in the Mediterranean, and our commitment to the political leadership to maintain a sufficient level of force in the Indian Ocean, to which both Admiral Watkins and I contribute, to establish the dominant maritime presence in the Indian Ocean, to deny to the Soviet Union and our other adversaries any option that requires support from the sea in that area. Those have become fixed commitments, where we have very little flexibility.

Therefore, if you apply an O. & M.N. cut to a fleet commander, you are in effect telling him that he has to take that full cut in the activities that he conducts in the home waters, if you will. Now, the activities that we as fleet commanders conduct in the areas around our naval bases are those activities where we prepare ships for deployment, where we prepare ships to go into the Mediterranean, where we prepare ships to go to the Indian Ocean.

Now, there is no question that we can take such cuts, but what we are going to find ourselves confronted with is a situation where we send lesser capable ships in terms of training and readiness to our forward-deployed commitments. So everything we do in O. & M.N. to adjust to a possible cut are taken in that period of time where we can manage the activities of a ship. It is liable to result in lower participation in readiness exercises, lower participation in composite training unit exercises, lower participation in joint exercises, such as Ocean Venture '82, and perhaps even lower participation in NATO exercises in the North Atlantic.

This is where we can adjust to the problem, whereas we cannot adjust those activities that we conduct in the forward deployed areas of the world.

Senator **Humphrey**. Admiral Watkins, would you respond to that?

Admiral **Watkins**. Mr. Chairman, we have, of course, the identical feeling that Admiral Train has. For years we have watched the O. & M.N. budget be the victim of the interest in adjusting outlays, the real issue. From about 1975 on, the Navy has bent over backward to force into the system a balanced budget. By balanced, I mean in all of the aspects, including O. & M., to support the introduction of new systems and to support of old systems. We have gotten out of the mold of "foot-in-the-door," so to speak, on systems that are not fully supported in the training line, personnel lines, spare parts support, and the like.

As a budget drill, then, to focus on O. & M. as the source of savings in my opinion is totally wrong. If there is a budget cut to be levied, and I would hope there would not be, it should not come from O. & M. alone. From a requirements point of view as a military commander responsible to carry out the national policy, we cannot sit here and ask for anything but what the Secretary of Defense has submitted, because we think it is in the right direction and in exactly the right areas.

So, if we again through budget cuts focus on one account to extract the dollars, we are violating the very concept which all of us abhor, which is to vertically remove segments of support for programs. It should not be done that way, and if there have to be cuts they should be across the board. Then the cuts, taken across the various accounts, allow continued balanced programs.

It has been the tinkering with balanced programs inside that has done so much damage, I think, and has contributed to the escalation of costs and belated procurement of necessities which then are far more expensive than they would have been had we not cut in the first place.

As to the specifics, I can provide, if you think it is of value to the subcommittee, for the record, a list which would be much more specific as to the impact on near-term readiness of those kinds of cuts. But I don't know that it is necessary, because it is a philosophical point.

Senator **HUMPHREY**. Yes.

Admiral **WATKINS**. We should come down in a balanced way across the board in all accounts if there is going to be a levy of a cut against us.

FORCE STRUCTURE REDUCTION

Senator **HUMPHREY**. If you followed that approach, would it require a reduction in force structure to some degree?

Admiral **WATKINS**. Yes, sir. I agree with that. I just think it is not a good question to ask if we could come down exclusively in the O. & M., budget. That is not the right question. I think the question is, if you are going to come down, how much would you come down in O. & M.? Answer—you would come down proportional to the total contribution of that account to any programs that were reduced, but it should not be done unilaterally against that one account.

Senator **HUMPHREY**. General Davis?

General **DAVIS**. I think that is the quickest way to have short-term degradation of readiness, because, you know, you are going to have to start cutting exercises which are going to impact on training readiness. You are going to start building up deficiencies by failing to replenish and replace equipment consumed in exercises conducted. Curtailing exercises will have an immediate impact on readiness while failure to replace equipment will impair future readiness.

Senator **HUMPHREY**. So, as far as you are concerned, our cutting O. & M. funds might be the quickest way to reduce outlays. However, it is also the quickest way to reduce readiness.

General **DAVIS**. I think it impacts on it very quickly.

Senator **Humphrey**. General Schwenk.

General **Schwenk**. Yes, sir. I can only reiterate what has been said. We are just beginning to get out of the woods after almost 5 years of negative growth in Fleet Marine Force Atlantic, and as I mentioned in my very brief statement, restocking the shelves, getting our shortages of T/E equipment resolved and our equipment maintenance up to a level that is acceptable. In fact, it is a good level. Any cuts now would just degrade all that, and training today is more expensive than ever. As I indicated in my brief statement, we have to go away from our home bases to get realistic training, and that is very expensive, and if you are going to send troops out in the field and have them shoot, just click their rifles and artillery pieces, and not allow them to fire the weapons realistically, training readiness goes down as well as the morale of the units themselves.

Senator **Humphrey**. It is the modern-day equivalent of training with broomsticks.

General **Schwenk**. Yes, sir.

TRAINING PROBLEMS

Admiral **Watkins**. Mr. Chairman, might I add one more point? For example, in the fiscal 1981 budget, we were given enough money to operate at 56 days per quarter for the 7th Fleet and 27 days per quarter for the 3d Fleet, the same thing in fiscal year 1982. In the budget that came in, in fiscal year 1983, we were given only 54 days per quarter in the 7th Fleet and 25.3 days in the third fleet.

Obviously, we are forced by our commitments, international commitments, to operate overseas at a higher pace. Therefore, that level is the minimum that we can accept and still carry out our commitments. This, then, forces our home fleet, if you will, the 2d Fleet and the 3d Fleet, to cut down significantly, and those then are faced with very serious training problems, and we have been there before, where we have been below those levels, and we know it is unsatisfactory. So, to drive it down again, it seems to me, if we can avoid that we certainly should.

Also, the flying hours. Now, in the 1983 budget we have boosted up our flying hours a few percentile points in what we call the PMR rating to our goal of 88 percent. We found that for retention of our Naval aviators, it was essential that we allow them to fly aircraft to that extent or they are going to leave in droves. So there is a readiness tradeoff there that is direct. We think that this flying hour goal should be preserved.

Last year, we were only given 53,200 hours per month, so we applaud going to the 56,300 hours per month that the CNO has requested, because again we can get up to our flying proficiency that we think is essential to maintain the kinds of battle groups that were on *Nimitz* that brought down the two Libyan aircraft last year. That is what we need, and therefore any cuts again will be directly impacting on our readiness and our fighting capability that the American people have come to expect when we are called to task.

SOVIET FLEET—TOOL OF DIPLOMACY

Senator **Humphrey**. Admiral Train, you called the Naval Fleet a tool of diplomacy, and in that context, have you seen any evidence yet or can you give us evidence of examples of the way the Soviets are using their growing fleet as a tool of diplomacy? What do your people see when they are out there in the far-flung corners of the oceans?

Admiral **Train**. One of the examples is the periodic presence in Cuba of both Soviet surface units—we see this on the average of once a year—and Soviet naval aviation TU-95 bombers that we see there almost all the time. These are tools of diplomacy in the context that they represent overt Soviet support for the Government of Cuba and for the policies of the Government of Cuba. They represent an indicator, a clear indicator, a deliberate indicator that the Soviet interests are irrefutably linked with the interests of Cuba.

In another example, perhaps of less concern, but nonetheless an example of the Soviet employment of naval forces as a tool of diplomacy would be the Soviet reaction to the seizure by Morocco of Soviet fishing vessels off the coast of Morocco. The Soviet Union reacted to that by stationing off the coast of Morocco a number of small combatant ships. Although this did not result in the return of the Soviet fishing vessels, it reduced the enthusiasm on the part of the Government of Morocco to seize Soviet fishing vessels.

A third example, among many others, is the presence in the Gulf of Guinea of Soviet ships 365 days a year, indicative of Soviet interest in the resources of the region, the political access to the region, and the possibility of interdicting the lines of communications upon which the United States and their allies depend in that area of the world.

There are some other examples which Admiral Watkins could mention to you in Southeast Asia and other areas of his theater. It is clear to us that the Soviets have learned and learned well the basic principles of Mahan when he articulated in the "History of Sea Forces" how to utilize naval forces in peacetime as a backdrop for political decision.

Senator **Humphrey**. I certainly agree with you, and I think that is an aspect of the growing Soviet navy that has escaped American public attention so far. As a land power with allies contiguous to her own border, and blessed with natural resources, the Soviet Union doesn't need that kind of navy.

Admiral **Train**. That is a very essential point.

Senator **Humphrey**. So you have to conclude that they are building it for something else, and I agree that it is to influence events and to intimidate. Are you beginning to see any intimidation?

SOVIET INTIMIDATION

Admiral **Train**. I would categorize their presence in Morocco as clear intimidation. I would also characterize their presence in the Gulf of Guinea as intimidation in one form or another. It is perhaps the preparatory step to arriving there in force, to condition the public to their being there, which is another form of intimidation. Clearly, their presence in Cuba is an attempt at microintimidation, because the forces there aren't big enough to cause us concern in a military way, but nonetheless their presence there is designed to be the first step in intimidating us to lay off of Cuba or not to put too much pressure on Cuba because they are involved.

Senator **HUMPHREY**. Yes. Admiral Watkins, what do you see in your sphere?

Admiral **WATKINS**. Startling new strategic shift of the Soviets in the Pacific has been the emplacement at Cam Ranh Bay, one of the finest bases in the world that we ever built, of their naval forces. They now lie astride of, you might say, the jugular vein of the oil flow from the Straits of Hormuz to the continental western United States, and our allies in Japan. That is a very key strategic spot. Each day we receive intelligence reports of their nuclear submarines, their finest surface combatants, their support ships, as well as their reconnaissance and ASW aircraft operating from that base. Soviet aircraft make long reach reconnaissance and ASW flights into the Philippine Sea as well as operating off the coast of Vietnam.

The Soviets are supplying the Vietnamese with support bases now at new sites in the south and in Kampuchea. This is of continuing concern. The Soviets are therefore using their naval power again as a very strong lever and an indicator to the world that they have stretched their defensive sea legs and have gone out into deep water. They are a very formidable adversary in that region. As a matter of fact, this expansion of Soviet operations has required us to review our strategic posture and forces in order to assure that they don't begin to get too attached to the South China Sea.

GROWING SOVIET PRESENCE

The South China Sea is a very controversial area because of oil exploration. There is also a lot of instability in the region. The ASEAN nations are extremely worried about the growing Soviet presence as well as the pressures of the Vietnamese in Kampuchea on the Thais, who are the last of our Western-thinking allies in the region.

Because of this concern we are working bilaterally with the Thai Navy, the Malaysian Navy, the Indonesians, and the Philippine Navy. So on the one hand the Soviets have made their presence known. They have influenced political events in the region. On the other hand, we, in turn must expend resources to counter their emphasis on that new strategy. That is one example.

In the Indian Ocean, there are many, many pressures by the Soviets to establish bases in Madagascar. We read about that in the paper. They are present in the Saychelles from time to time. For example, during the attempted coup there, the Soviets raced in with combatant ships. This is another indication of the spread of their sea legs out well beyond their own frontiers or defensive needs.

The Soviets are also present in the Dahalak Island in Ethiopia, which is at the very point of Bab El Mendeb Strait, coming out of the Red Sea into the Indian Ocean. The Soviets are in Dahalak in a very sophisticated way with, albeit temporary, a very fine support facility, repair facilities and the like. So again, in our region of the world, much as in Admiral Train's, the increased capability of the Soviet now after 20 years of most incredible growth, may achieve the dream of the czars. They are reaching around the world to these sites and insuring their capability to influence world events through maritime power. This capability is not essential for them to protect their own sea lines of communications. In fact, the Soviets do not need sea lanes for imports as with the United States, which is the greatest importing nation in the world.

CIVILIAN SHIPPING

Senator **Humphrey**. This is probably difficult for you to answer, but I think it is central to the view of Soviet naval forces. How difficult would it be to intimidate civilian shipping through some of these sea lanes? In other words, what I am getting at is, in a time of land or political crisis, how difficult would it be for Soviet naval forces, for instance, to intimidate civilian shipping involved in transporting oil to Japan; intimidate them to the point where they divert their ships to other commerce, perhaps tie them up for a while?

Admiral **Watkins**. I think it would be very difficult for them to do that, because I think the international opinion that would be brought to bear against them would be very severe. I don't see the Soviets intimidating civilian shipping except in a very regional context. Perhaps they would do so to one of their own Warsaw Pact nations that might get out of line. I could see them doing that, in which case we would have a situation not unlike the Polish situation on our hands. We would be watching very carefully; but, after all, they would be within their own Warsaw Pact area with their own concept for what is permissable inter-state conduct. I don't see them challenging civilian shipping on the open seas, because such action would certainly be a violation of international law. We recently had an attack made against a Japanese flag ship by one of the Philippine Air Force planes because of suspected smuggling of arms. That action caused quite an international furor, and there was great debate over the pros and cons. Therefore, I don't see Soviet intimidation of civilian shipping as a very useful device.

On the other hand, do the Soviets have the potential to do it? Certainly they do. They could do it almost anywhere if they wanted to challenge the U.S. backbone and spine.

Senator **Humphrey**. Senator Levin, the ranking member of the subcommittee, has joined us. Senator Levin?

Senator **Levin**. When that Russian sub got tangled up in Swedish waters was there any effort made on the part of the Swedes to involve us in that dispute?

Admiral **Train**. I will preface my response with the observation that that is not my area, Senator Levin. I am not aware of any attempt on the part of the Government of Sweden to involve the United States in either a military or a political way with that event.

BUDGETARY REDUCTIONS

Senator LEVIN. Admiral, you say in your statement that budgetary reductions such as occurred this year imposed after a significant part of the fiscal year has passed requires reprograming efforts that are not cost effective, create an unstable training environment, and magnify the impact of such cuts on readiness. What specific budget cuts are you referring to?

Admiral TRAIN. There are a number of ways that this type of phenomenon can occur. When we do not have a budget to begin the year with, and we go into the continuing resolution type of budgeting. That is one aspect of the question. If we are cut, say in the middle of the year, in operating tempo, steaming days, flying hours, then we have to make up that cut in the remaining months of the year.

Last year I had to go in for additional steaming days, because it was obvious that we would go over our budget as we approached the end of the year, when we were fully involved in a very large-scale exercise.

Senator LEVIN. You made reference to specific budgetary reductions, such as occurred this year. Were you referring to the October reductions?

Admiral TRAIN. I am not referring to the October reductions. I am talking about reductions that took place in the middle of the year. I will provide that in very specific terms for the record.

[The information follows:]

Being at the end of the funding chain, it is impossible for me to determine where most reductions and restorals emanate—I therefore would offer to you some of the more general disruptive occurrences experienced during the first six months of this fiscal year:

Lack of an Appropriations Act or Bill or Continuing Resolution Authority to begin the O&MN fiscal year.

No benchmark such as an OSD budget to establish controls.

Severely reduced New Obligation Authority allocation to meet first quarter commitments.

Three changes in the Steaming Hour Program funding in the first 90 days—the last in late December.

Multiple changes in remaining programs continuing through the middle of February.

Official Operating Budget received in the last week in February.

Indirect reductions which trickle down as a result of reductions to other Washington activities which support the Fleet. This requires additional rebalancing of Fleet funds to cover loss of this support.

Senator LEVIN. OK. You say also in your statement that we must continue to provide increased funding for training, steaming time, and flying hours to insure that our current forces maintain a high level of operational readiness. In at least one of these areas, steaming time, the fiscal year 1983 budget does not provide for these increases. In fact, it provides for decreases. The 2d Fleet steamed an average of 31 days per quarter in fiscal year 1982. This level was cut to 28½ days in the fiscal year 1983 budget. The CNO's objective for the 2d Fleet is 39 steaming days per quarter. My question is, are you satisfied with all those steaming days in the fiscal year 1983 budget for the 2d Fleet?

Admiral TRAIN. I have some problems with the numbers which I will address in a minute. You were not here when we discussed this type of thing earlier. I would like to point out that my management control over steaming days is limited to the management of 2d Fleet steaming days. I really have no control over, nor does anybody else, over the steaming that we do in the Middle East force, the 6th Fleet, and the Indian Ocean.

For example, this year, through January, we have steamed 61.8 days per quarter in the Middle East force, 61.59 days per quarter in the 6th Fleet, 82.77 days per quarter in the Indian Ocean. Overall, this equates to about 32.13 days steaming, but I have had to hold some days back in the 2d Fleet to allow for the increased requirement to steam in the Middle East or the Indian Ocean, and also to allow us to maintain those ships that spend a predominant part of the year, away from maintenance and away from their home port and those ports in which their crews can rest.

So, if, and I say if because we really do exceed, we really do meet our planned figures in the 2d Fleet——

Senator LEVIN. You really do what?

Admiral TRAIN. We really do meet our figures in the 2d Fleet when the year is over, but at the start of the year I have to hedge, and hold some things back. Last year I actually exceeded my budgeted figures and had to ask for additional moneys at the end of the year.

Senator LEVIN. Maybe my question isn't clear. Let me try it again. There is a certain budget level which was established in the fiscal year 1983 budget for the 2d Fleet. That level is 28.5 days. Is that right?

Admiral TRAIN. No, sir, it is 26 to 27 days.

Senator LEVIN. It is what?

Admiral TRAIN. It is 26 to 27 days in the 2d Fleet this year.

Senator LEVIN. For 1983?

Admiral TRAIN. Yes, for the 2d Fleet, and 51 days for the 6th Fleet, and 80 to 90 days for the Indian Ocean.

Senator LEVIN. I am just talking about the 2d Fleet.

Admiral TRAIN. Yes, sir.

Senator LEVIN. We have enough trouble agreeing on that.

The CNO's objective for the 2d Fleet is 39 days per quarter. Is that right?

Admiral TRAIN. Say that again, sir. I am sorry.

Senator LEVIN. The CNO's objective for the 2d Fleet is 39 steaming days per quarter.

Admiral TRAIN. I am not familiar with that figure. No, sir. I don't believe that is correct. I don't believe he sets an objective for the 2d Fleet. I do.

Senator LEVIN. OK. What is your objective?

Admiral TRAIN. Twenty-six to twenty-seven days per quarter. That is what I am budgeted for.

Senator LEVIN. Are you satisfied with the budgeted days of steaming of the 2d Fleet?

Admiral TRAIN. I think that is what I can manage.

Senator LEVIN. The answer is yes.

Admiral TRAIN. Yes.

Senator LEVIN. Now, your statement points out that there is an established optimal threshold below which training effectiveness falls off rapidly, and critical combat skills cannot be maintained.

What is that minimum level of steaming time below which training effectiveness cannot be maintained?

Admiral **Train**. As you take a ship over its entire operating cycle, that knee of the curve where you have the best tradeoff between maintenance and operational proficiency is approximately 43 days per quarter. Now, as you take a ship across its entire cycle of maintenance, deployments, time spent in home waters, leave periods, you find that when the ship is deployed it far exceeds that knee of the curve for any specific period of time, and when it is not deployed, it does not meet that figure because we have to make other adjustments.

Over the course of the appropriation year, in the entire Atlantic Fleet, remembering that I have deployed responsibilities, 35 budgeted days overall is what has been given me as a Fleet Commander, and is a figure I am comfortable with.

Senator **Levin**. Was your budget request granted in full in terms of steaming days?

Admiral **Train**. I have received all the steaming days I have requested, yes, sir.

Senator **Levin**. We have the statement of Rear Adm. Richard Miller, Director of the Budget Office of the Navy.

Admiral **Train**. Do I have his statement?

Senator **Levin**. No, do you know who he is? Do you know Admiral Miller?

Admiral **Train**. Yes, sir, of course.

FLEET OPERATING DAYS

Senator **Levin**. On page 8 of his statement he gives the operating days per quarter for the 2d Fleet, 3d Fleet, 6th and 7th Fleet. His figure for fiscal year 1983 is 28.5. Would you know where he would have gotten that figure?

Admiral **Train**. Let me look.

[Pause]

Senator **Levin**. I thought I heard some shuffling of papers behind me, and I knew my staff was going to defend me to the hilt. And I see that your staff is going to defend you to the hilt. I will match you staff for staff.

[Pause]

Admiral **Train**. For fiscal year 1983?

Senator **Levin**. Yes. For the 2d Fleet.

Admiral **Train**. For the 2d Fleet, my nondeployed figure is 26 days; deployed is 53 days. Total weighted average is 32.

Senator **Levin**. These figures come from Admiral Miller's statement, which I think was given to us just a few days ago. So maybe you ought to get together with Admiral Miller. We ought to get our staffs together to figure out where we are off.

Admiral **Train**. I am the gentleman with the checkbook.

Senator **Levin**. You are or we were.

Admiral **Train**. You give me the money to put in the bank account, and I am the one who writes the checks. And those are the checks I have written.

Senator **Levin**. So we can forget Admiral Miller's testimony?

Admiral **Train**. I would not recommend it, no, sir.

Senator **Levin**. Did you cut your steaming hours this year?

Admiral **Train**. I did not.

Senator **Levin**. Let us try Admiral Watkins.

Admiral, steaming hours for the 3d Fleet under your command dropped from 27 steaming days per quarter in fiscal year 1981 and fiscal year 1982 to 25.3 steaming days per quarter fiscal year 1982, according to the statement which we just described. Is that an accurate figure?

Admiral **Watkins**. Yes, that is right.

Senator **Levin**. Now, the CNO's objective, is that a meaningful phrase, the CNO's objective?

Admiral **Watkins**. I think the CNO's steaming objective is 34 days per quarter for the Pacific Fleet overall. That is an overall average. He gives that objective to me, and that is worked into our budget submission back to the CNO; 54 days per quarter in the 7 Fleet and 25.3 in the 3d Fleet for fiscal year 1983 are the budgeted figures.

Senator **Levin**. What is it? 25.3?

Admiral **Watkins**. 25.3 in the 3d Fleet, 54 in the 7th Fleet, which averages out to 34 days per quarter across the board in the Pacific Fleet. That is the way I allocate it. I can live with the operating tempo that is the 1983 budget.

Senator **Levin**. Was that your full request?

Admiral **Watkins**. That was not our full request, Senator Levin. However, we received some adjustment in the operational scheduling of ships during this period. This permitted my desires to be accommodated even after the budget submission went in.

For all practical purposes our submission was in error. But, because we did change the operating scheme of ships in the Western Pacific in the interim, this budget now supports us and we can live with the 1983 budget figure for OPTEMPO.

However, as I pointed out to the chairman earlier, I do believe this is the minimum acceptable level that we are talking about there. And Admiral Train mentioned a goal: If we had all of the funds we would like, we would probably ask for more OPTEMPO to give us more flexibility in operations, training, and maintenance.

Senator **Levin**. If you had all the funds that you would like?

Admiral **Watkins**. Yes. But we know we have to balance this off with other things because the time at sea, the operating tempo affects the maintenance support. There are all sorts of ancillary puppy dogs trailing along behind the OPTEMPO. So you cannot have it all. We must do at least the minimum OPTEMPO that is essential to maintain our training preparedness.

Admiral **Train**. I have to say something here, if I might.

FINANCIAL CONSTRAINTS

Senator **Levin**. I presume there are lots of constraints on OPTEMPO, things that have to work together. But one of those constraints is financial?

Admiral **Train**. Certainly financial.

Senator **Levin**. That is why I asked you whether you asked for more than you got.

Admiral **Train**. I think essentially we got what we asked for as modified by the subsequent changes in the operational parameters, which we worked with the CNO's office, yes, sir.

SECOND FLEET STEAMING DAYS

I merely want to point out that my constraints in operating days within the 2d Fleet are not dicated by budgeted levels of steaming days but rather by the low number of days I have those ships in the 2d Fleet and are such that I really could not use more money for steaming in the 2d Fleet than I have at the present time.

I do not mean to imply, however, that such flexibility would not be useful in order to hedge against the possibility I might have to deploy more ships to the Indian Ocean for a short period of time or a long period of time or deploy more ships to the Mediterranean. In the 2d Fleet I find that I could not steam more than I am steaming now.

Senator **Levin**. Well, our figures are again different. And rather than trying to figure them out here, we will just try to get the staffs together with yours and Admiral Miller and see if we can figure out why these figures are so different.

Admiral **Train**. My figures pretty much are as Admiral Watkins.

Senator **Levin**. Yes, I know your figures are not too different. But the two figures that you give us are very different from the ones which Admiral Miller gave us.

I have some other questions on a different subject, Mr. Chairman. But I think I have taken enough time.

Senator **Humphrey**. Admiral Train, you mentioned earlier that you have too few carriers to fulfill the requests of our political leaders.

Admiral **Train**. Yes, sir.

Senator **Humphrey**. I have a feeling that is true of all of or most of our assets with land, sea, air, versus the demands placed upon them by our political leaders; that is, our commitments. At some point, does a senior commander say to political leaders, I cannot do the job, I cannot do all that you have asked of me?

Admiral **Train**. We do not use those words. We say, if you wish to deploy forces to an area of the world to influence events, an area of the world where we are currently not deployed, or if you wish to increase your forces in one area of the world in order to influence events better, then we are going to have to stop doing something someplace else.

CARRIER BATTLE GROUPS

This is precisely what we did when we were told to establish the Indian Ocean presence. We told our political leaders that if we were going to establish a significant maritime presence in the Indian Ocean, significant being two carrier battle groups, that we would have to take those forces from already deployed forces, specifically the Mediterranean and the Western Pacific.

So at the time we moved our two carrier battle groups into the Indian Ocean, we reduced our presence in the Mediterranean by one carrier battle group and we reduced our presence in the Western Pacific by one carrier battle group.

This is an example of the type of impact that we convey to our political leaders at the time we are tasked.

Senator HUMPHREY. That is so, to be sure. But at the same time, I am always uneasy about testimony we receive which vaguely hints at defeat but does not come out and say it.

You say in your testimony—it is a good example—that the current assets are inadequate to execute simultaneously all major requirements of general war. The next decade will be a dangerous one for the Navy and our Nation.

What are those dangers?

Admiral TRAIN. The governing word there is "simultaneous," and this means to imply that if we become involved in a war at sea, a NATO-Warsaw Pact war, that it is quite likely that our political leaders will have to prioritize the application of our military forces between regions and between areas. Specifically, we may well have to make a decision to fight a Mediterranean campaign before we fight a North Atlantic campaign.

However, it goes without saying that this choice might not be left up to us. If, for example, we make a conscious decision that we will give priority to the Mediterranean campaign and deploy three or four carrier battle groups to the Indian Ocean or to the Eastern Mediterranean, it is entirely possible that the Soviets may deter us from doing that once we have our forces malpositioned by embarking on an energetic and extensive interdiction campaign designed to insure that we cannot reinforce and resupply our allies across the Atlantic.

This is the significance of the words in my statement, words that I personally wrote. And this is the significance of the dilemma in which we find ourselves. I would describe the situation as dangerous.

Senator HUMPHREY. In the kind of scenario which you would regard as likely and realistic, is the Navy ready in the sense that it could fulfill what political leaders would expect of it?

Admiral TRAIN. The Navy can fulfill what political leaders expect of it at that point where the Navy is committed, the Eastern Mediterranean, North Atlantic and those specific areas of the world where we have been given the commitment and have deployed our forces to carry out that commitment.

But, we cannot responsibly tell our leaders that we can do everything in every ocean area of the world simultaneously, that we may be called on to do. That is the significance of the force shortfalls that we are confronting today.

MARITIME BALANCE

It really has nothing to do with the maritime balance. The maritime balance, if you wish to measure it in terms of numbers or ships or tonnage or whatever, whatever descriptors you might want to use, is completely independent of your ability to take your own force, divide that force up into packages of sufficient concentration to prevail in any one area and then commit that force to that area.

Today we are concerned about the North Atlantic, the Caribbean, the South Atlantic, the Mediterranean, the Indian Ocean, the

Western Pacific, Southeast Asia, the mid-Pacific, and the Northwest Pacific.

We obviously cannot take our 13 carriers or 12 carriers, however you want to measure it, and apply them to all those areas where the vital interests of the United States might be at risk simultaneously. That is the significance of our analysis.

Senator **HUMPHREY**. In your equation you state that the United States has many things going for it, particularly in the maritime arena: A tradition of victory at sea not enjoyed by our opponents. That is a fine tradition, but how does that add to our capabilities versus the Soviet's?

Admiral **TRAIN**. What I am attempting to articulate there is that our sailors and our officers and our leadership have victory going for them. They are accustomed to victory. They are not accustomed to losing at sea.

The Soviets have no maritime heritage. Those wars at sea that they have fought have been either unremarkable or they have lost.

This, when all other things are equal, may be the intangible factor that tips the balance in our favor. It is very little to have to count upon, but nonetheless it is a factor, an intangible factor which might work in our favor. It also might not.

Senator **HUMPHREY**. It is, in my opinion, very little to depend upon. In fact, I would describe it, except in the context that you meant it, as grasping at straws.

Admiral **TRAIN**. We have to grasp at straws occasionally.

Senator **HUMPHREY**. In terms of readiness, your assessment is that we are slightly better off than a year ago?

Admiral **TRAIN**. Yes, sir.

Senator **HUMPHREY**. If the 1983 budget is approved in all respects, then we will be continuing that trend?

Admiral **TRAIN**. Yes, sir.

Senator **HUMPHREY**. How do you foresee things down that way 2 or 3 years, if that is the case?

SOVIET THREAT—CLOSING THE GAP

Admiral **TRAIN**. I see us closing the gap between the Soviet threat, the air threat to our forces at sea and our ability to cope with that threat, as the AEGIS weapons systems come into the Fleet, and as the SM-2 missiles come into the Fleet, I see us keeping our antisubmarine warfare systems lead and not losing any ground as the Soviets develop better and better submarines. I think we are keeping step with them in that area.

One of the problem areas will be electronic warfare, where I am not sure that we are accomplishing all that we should be accomplishing with the assets that are being made available to us.

Amphibious warfare, if the programs that are in the President's budget are approved, will be significantly enhanced and will provide that additional dimension that is so important to us as we contemplate the possibility of a campaign at sea.

Senator **HUMPHREY**. You seem to have made considerable improvement in the area of personnel. You have steaming hours, and you feel that you can successfully sustain, given the force structure?

Admiral **Train**. Yes, sir. I think there are some dangers here. We are in a situation in the field of personnel, where you and the Congress have created a very healthy set of expectations to which the men and women of the Navy are very sensitive.

For example, a year ago last October, you passed that magnificent set of pay and compensation measures, that alerted everyone in the military that was making a career decision to the fact that things might really be getting better. It was not until you fulfilled those expectations last October with additional pay and compensation measures that we felt the full impact of things you did a year ago.

At the same time you have now created a set of expectations, and if they suddenly become unfulfilled or violated, we will probably lose more ground than we have gained. That is why I personally place a very, very high priority on the pay and compensation measures, perhaps to the exclusion of all other items of the budget.

Senator **Humphrey**. I am just trying to sum up in terms of the usual readiness to see if I can understand correctly the posture you are presenting. We have made some significant progress in the area of personnel?

Admiral **Train**. Yes, sir.

Senator **Humphrey**. You feel that you have the steaming days that the force structure can successfully carry out without straining itself?

Admiral **Train**. Correct.

Senator **Humphrey**. Your flying hours are coming up and depot maintenance is improving except for one category, cannibalization. What is the problem there?

SPARE PARTS MANAGEMENT

Admiral **Train**. We have reached a point where, as a result of previous policies and spare parts management, our supply of spare parts is so low that we are unable to keep our ships steaming and aircraft flying in the face of unexpected casualties for which we have no spares.

Senator **Humphrey**. But are those spares on order by virtue of the 1982 budget?

Admiral **Train**. We are slowly improving our spare parts posture. The moneys that have been put into the budget to help us achieve this appear to be wisely applied. If the program is followed over the next 5 years, I think that we can look forward to a period of time when the operating forces can function without having to resort to the cannibalization that Admiral Watkins described earlier.

Senator **Humphrey**. How severe is the cannibalization problem today?

Admiral **Train**. We find, for example, that to keep between us 4 aircraft carriers deployed, that the cannibalization of the nondeployed carriers and their air wings are such that the nondeployed carriers are really not very effective fighting assets.

I would say that this situation is probably worse this year than it was last year. But we are seeing the effects of sins that were committed not last year but 4 or 5 years ago in the form of spare parts acquisition policy and spare parts management policy.

Senator HUMPHREY. Admiral Watkins, in that same vein, is your opinion at all divergent from Admiral Train's in your own command?

Admiral WATKINS. No. I have a graph provided in the record—which shows that the actual cannibalization rate of the Pacific Fleet is on a modest increase, currently about 5,800 cannibalizations a month.

You can imagine what this does to the morale of the technician who has an up aircraft and must pull components out to put in a down aircraft. This is certainly robbing Peter to pay Paul.

For example, component rework is a very significant part of the cannibalization rate. In other words, the cannibalization rate is a measure, if you will, of how many resources apply to component rework. The shortage in equipment rework for fiscal year 1982 is $57 million compared to a 1981 shortfall of only $24 million.

What I am saying is that we budgeted for doubling the deficit in 1982 for a variety of reasons of which I do not have all the details. However, in the 1983 budget it is fully funded.

What happens in the rework process is that the component rework is not just a function of a spare box. It also has to do with the civilian ceiling points at a Naval Air Rework Facility (NARF). If you do not have the manning available to work on the component, you do not get it reworked.

In some other part of the Pentagon, somebody is cutting down on civilian ceiling points because we want to cut down the size of manpower in the Government. The net result is the components stack up on the shelf. It was not the intention, as I mentioned earlier, but that is what really happens. That situation, for the most part, is the case.

We are not moving those components through the system quickly enough. That is a very significant part of the cannibalization problem. We are not getting better in that area for a variety of reasons that do not all deal with just funding the work. Normally the Congress will fund the component rework but also another group does not allow the manpower to execute the program.

Senator HUMPHREY. Has the Navy made any requests for this year to deal with the problem?

Admiral WATKINS. Yes, sir, they have got sufficient funding in the budget and we have additional manpower going into the activities to support the 100 percent of the rework. This will get rid of the shortfall. I believe this corrective action is over the 5-year period.

MAINTENANCE AND REPAIR BACKLOG

Senator HUMPHREY. What other problems are there with onshore facilities?

Admiral WATKINS. One of the big problems, of course, is the backlog of maintenance and repair. Usually this is low man on the totem pole. When you visit our facilities abroad you see walls in bad need of repair, pilings breaking away, concrete blocks that are coming apart, and roads that need upkeep.

This is a very significant deficit. I believe that is on the order of $120 million, for example, in fiscal year 1983 alone. But by the same token, can we pin that down to direct applicability to readiness? It is indirect.

I think again that when we are trying to come in with a responsible budget and do the very best we can, funding for maintenance and that will be repair reduced and we will live another year with the 100-year amortization rate or whatever it is on old buildings.

So we will get our Seabees to paint those buildings once more. We can do that. We have done that for so many years now that it is quite the norm, although the Congress has asked us to delete that deficit and get on with it. We have tried desperately. And again, escalation costs and all of the programs tend to focus attention on maintenance and repair funding as a place to cut.

Senator HUMPHREY. What is the trend?

Admiral WATKINS. The trend is negative and is getting worse.

Senator HUMPHREY. Including the 1983 budget?

Admiral WATKINS. I do not know that, Mr. Chairman. I have left Washington. I left here last summer. Last summer the best information I had was that it was going in the wrong direction and there was very little we could do about it as the budget went through the system, without seriously impacting on the critical programs that we had in other areas.

PROPERTY MAINTENANCE ACCOUNTS

Senator LEVIN. Well, according to our figures—and we are having a little trouble here today with figures—your real property maintenance accounts drops from 1982 to 1983 from $178 million to $152 million. Does that sound about right, Admiral Watkins?

Admiral WATKINS. Yes, sir. That was in my statement. Yes, sir, that is correct.

FLEET STEAMING DAYS

Senator LEVIN. Since we are on figures, let me get back to the question of steaming days. I am very much intrigued by the difference 3 days can produce, and I would like to get the figures on the record so we can be very clear as to where the differences are between your testimony and Admiral Miller's testimony on steaming days, which certainly is a readiness factor.

I know that you are trying to say that readiness has not been injured in this budget, and I have the opposite conclusion. But at least let us try to agree on the figures, and maybe we can draw the same conclusion.

This is a page from his statement. It is page 8. Do you both have copies of it?

Now, maybe first we can go to Admiral Train and see if we can just get your figures, if you would. First, for 1982, would you happen to have those figures handy for the 2d and 6th Fleets?

Admiral TRAIN. Yes, sir.

Senator LEVIN. And instead of the 31 that he shows, what do you show for 1982 for the 2d Fleet?

Admiral TRAIN. For 1982, I show 28 for 2d Fleet, and 52.4 deployed forces. For total weighted average of 33.6.

Senator LEVIN. Let me just put this in my lingo. Instead of 31 you get 28?

Admiral TRAIN. Yes, sir.

Senator LEVIN. And on the 6th Fleet, instead of 62.5?

Admiral TRAIN. I have 52.5 deployed. That was not only the 6th Fleet but the Middle East force and the ships in the Indian Ocean.

Senator LEVIN. For 1983 what do you show for the 2d Fleet?

Admiral TRAIN. Twenty-six.

Senator LEVIN. And for the 6th?

Admiral TRAIN. For deployed forces, in the 6th Fleet, Middle East force and Indian Ocean from my fleet, 53 days. For a total weighted average of 32 days for the entire Atlantic Fleet.

Senator LEVIN. All right now, Admiral Watkins, can you give us your figures?

Admiral WATKINS. I agree with page 8 of Admiral Miller's report for all fiscal years.

Senator LEVIN. You agree with those figures?

Admiral WATKINS. Yes, sir.

Senator LEVIN. So the upshot of this is there is a reduction in steaming days from 1982 to 1983 for the 2d Fleet, according to both Admiral Miller and Admiral Train. For the 3d Fleet, according to everybody, for the 6th Fleet, no, it stays about the same, 52.5 and 53. For the 7th Fleet a reduction.

And on the overall for the Navy, according to this—I do not know whether the two of you can get all your figures together—but according to Admiral Miller's statement, it goes down from 41.6 to 40.2. I do not know whether you could agree with that, because that is putting all those together.

Admiral TRAIN. Mine goes down slightly on a weighted average.

[Additional information follows:]

I would like to clarify my previous testimony on the subject of OPTEMPO. As noted in my written testimony, the Atlantic Fleet is budgeted for 28.5 days per quarter for non-deployed ships and 53 days per quarter for deployed ships in fiscal 1983. This OPTEMPO is based on an operational schedule and consumption data which were our best estimates at the time of the budget formulation. Since that time, we have had to adjust our schedule putting more fossil fueled ships in the Indian Ocean because of continuing restrictions on the transit of nuclear powered ships through the Suez Canal. The result is that fossil fueled battle groups will spend more time in the Indian Ocean. To support those fixed deployments, we will have to reduce our non-deployed OPTEMPO slightly to the level of 26 days per quarter which is the number I gave you. The difference is one of execution rather than budgeting, and when we get to the point of execution of the fiscal 1983 budget, we may find that we are able to do better than the 26 days per quarter I have given you.

Senator LEVIN. So in both of your cases, there is a reduction in steaming days from last year.

Now, cannibalization. Admiral Watkins, you said in your statement that there was insufficient near-term funding for procurement of additional spares.

Admiral WATKINS. That is correct. In prior budget years, yes, sir, that is correct. But not in 1983. The 1983 budget begins to eat away at those shortfalls and brings the situation back into balance. I believe corrective action is spread over the 5-year period.

Senator LEVIN. Did you get everything you asked for for spares?

Admiral WATKINS. Yes, sir, we did.

Senator LEVIN. And you said there is insufficient near-term funding for procurement. What years were you referring to?

Admiral WATKINS. Perhaps that is worded wrong. The intent there is to say that because of the lack of funding that was applied in the past years, we are going to continue to see shortages because it takes about 2 years to deliver these units to the fleet. Even though we augmented funding in 1981 and 1982, that application of resources will not come to fruition until the 1983 and 1984 timeframe. That was the intent of the statement.

Senator LEVIN. You were not referring then to this year or the outyears, you were referring to we did not start early enough?

Admiral WATKINS. No, sir, the lead time is normally 2 years.

DEPOT MAINTENANCE FUNDING FOR AIRCRAFT COMPONENTS

Senator LEVIN. Admiral Watkins, I would like to ask you about depot maintenance funding for aircraft components. What are the shortfalls in that area that you are expecting for 1983? You seem somewhat dissatisfied with the level of that funding.

Admiral WATKINS. As I mentioned earlier, Senator Levin, there were shortfalls in 1981 and 1982. The 1981 shortfall was $24 million. The 1982 shortfall on component rework was $57 million. Because of those shortfalls we are now seeing a decline, a continuing decline in one indicator of that shortfall, the cannibalization rate.

I have provided a curve for the record on cannibalization rate which shows a modest increase. That is, we are not improving in that area as opposed to the other area in aviation support. In the other areas we have improved across the board.

Senator LEVIN. OK. Admiral Train, what about your cannibalization problems?

Admiral TRAIN. Yes, sir, I have a cannibalization problem of about the same magnitude as Admiral Watkins. It does not differ to any extent from the problem described by Admiral Watkins.

Senator LEVIN. And is there a shortfall in your spares in 1983?

Admiral TRAIN. I am going to have to provide that for the record, Senator Levin, which I will do.

[The information follows:]

There will be a shortfall of spares in 1983. Although the fiscal 1983 requirement is fully funded in the budget, procurement lead time will result in there being a shortage during that year. During fiscal 1981, our availability ran [deleted] percent and it has run at that same level during the first portion of this year.

Senator LEVIN. Now, flying hours program, Admiral Train, there seems to be a slight reduction from the 1981 level. Does that strike a bell? Can you give us those figures?

Admiral TRAIN. Yes, sir. From 1981 to 1982 I went from a total PMR of 85.9 in 1981 to 83.7 in 1982 without simulators. In fiscal year 1983 I am back up to 84.5 without simulators.

The flying hours program, fiscal year 1981, 617.4 thousand hours; for fiscal year 1982, 604.9 thousand hours; and for fiscal year 1983, 616.9 thousand hours.

The budgeted money for flying hours went from 9.1 million barrels in 1981 to 8.9 million barrels in 1982 to 9.1 million barrels again in fiscal year 1983.

Senator LEVIN. OK, Admiral Watkins, where are you in terms of flying hours? Are you showing a decrease still?

Admiral WATKINS. No, sir, we are showing in fiscal year 1983 an increase for the first time in 2 years.

Senator LEVIN. Are you at the 1981?

Admiral WATKINS. Fiscal year 1981 was 53,400 hours per month, which equates to PMR accomplishment actually on the PMR in the aircraft of 81.5 percent; with simulators, 84.5. In fiscal year 1982 it was the same, 53,200 hours per month, which equates to an actual PMR accomplishment of 82.0 percent in the aircraft, with simulator 85.0 percent.

In fiscal year 1983, a budget amount providing for 56,300 hours is submitted which takes us up to the flying hour program of 88 percent of PMR. 3 percent of that will be simulator. That is the goal set by the CNO for minimum PMR.

Senator LEVIN. And you are above the 1981 level.

Admiral WATKINS. Yes, sir, we are above the 1981 and 1982 levels, which are constant.

Senator LEVIN. And Admiral Train is slightly below the 1981 level; is that correct?

Admiral TRAIN. Yes, sir, correct.

Senator LEVIN. Are you both satisfied with flying hour levels? What about you, Admiral Watkins?

Admiral TRAIN. Yes, sir, I am.

Admiral WATKINS. The Indian Ocean, Senator, complicates any simple linear relationships between our two fleets. The long legs, the problems associated with flying hours in the Indian Ocean, the demand that we have placed on the crews, all tend to distort the figures slightly both in the flying hours and in the ship fuel consumption.

So it is a little difficult to average levels between the fleets out because there definitely is greater usage of the fuel in the Indian Ocean across the board, both aircraft and ships.

Senator LEVIN. I have two more questions. I think I am way over my time. I have a question for General Davis and for General Schwenk.

WAR RESERVE REQUIREMENTS—SHORTAGES

First, General Davis, what are the principal shortages in the war reserve requirements? And give us an estimate as to when they will be eliminated, if ever. And I will ask General Schwenk the same question.

General DAVIS. First off, we are in pretty good shape with most of the areas except supply Class 7, which are principal end items and supply Class 6(A) aviation ordnance. Aviation missile shortages were previously discussed by the Navy. We have only 8 days sustainability for principal end items.

Senator LEVIN. Can you give us examples of those items?

General DAVIS. Tanks, LVT's, or assault amphibian vehicles. And, of course one of the primary reasons for the shortages, especially the LVT7, is all of our war reserves coming out of our stores system to be loaded on near term pre-positioned ships. We took all the stuff out of our supply depot and it is now pre-positioned aboard ship in the Indian Ocean.

Senator Levin. What is the shortfall? Can you give us in terms of days what the shortfall is in specific items?

General Davis. We have a hard requirement for 60 days sustainability if committed to combat and we have approximately 8 days actually available. Now, of course, the quantities of each item contained in this requirement are based on combat action replacement factors which identify projected losses under certain combat intensity scenarios.

Senator Levin. How about ammunition, patrols, spare parts?

General Davis. We are S-1 in ground ammunition. However, where we have a problem is air-to-air munitions, the same as the Navy, because that is where we get ours. I have 24 percent of the requirement for AIM-7, and I have got 35 percent of the requirement for the AIM-9.

Senator Levin. I have been reminded that we are in open session. So whatever you should not be telling me in open session, I assume you will not be telling me.

I think we had better not pursue that with you any further. I think we are getting into an area there we may not want to get into.

General Schwenk, can you comment in terms of the principal shortages in the war reserve requirements?

General Schwenk. Again, in open session all I can say, in my force the primary shortage is ammunition. And I would like to let it go at that and submit it for the record if you would like more.

Senator Levin. It could be useful if you could give us those specific shortages for the record in the executive session. I will not be here to ask them, but if we could have those for the record.

Thank you, Mr. Chairman.

Senator Humphrey. General Davis, what is your overall assessment of readiness versus a year ago?

General Davis. Well, I can just give you a couple of examples. I have 229 active reporting units. A year ago 109 or 48 percent of those were C-1 or C-2. Now we have 137 or 60 percent of these units at C-1 or C-2.

All 18 of the infantry battalions are C-1 or C-2 and 25 out of 34 flying squadrons are C-1 or C-2. So we have made considerable progress there. The shortages are in personnel, and again we get into the classified section if I detail those.

TRAINING READINESS

Senator Humphrey. Was inadequacy of training a problem last year?

General Davis. Training readiness has not been a problem. We have plenty of exercises. It may be in some specific areas, because of lack of training ammunition. But generally, training readiness is up very high.

Senator Humphrey. General Schwenk.

General Schwenk. Yes, sir.

Senator Humphrey. What was your problem last year?

READINESS

General **Schwenk**. Readiness, Mr. Chairman. All the four deployed units, those going to the Western Pacific or Mediteranean are at a high C-1. The rest of the force is at a C-2 with the exception of the force service support group elements, some of which are still cadred and some of which are just being fleshed out now, which are then in a C-4 or a low C-3 category.

But the trend is upward primarily because of retention and emphasis by the Commandant to increase the strengths of the force service support board elements of the corps.

But the wing and division are both substantially combat ready, overall, C-2 with many of the units C-1, without getting into specific numbers.

Senator **Humphrey**. Is training adequate to meet your needs in the 1983 budget?

General **Schwenk**. Yes, sir, in the Atlantic we get into brigade-size exercises on an alternate-year basis. And this year we have two of them programed under Admiral Train. So every other year we get what we feel is the proper sized exercise to say that we are ready to go to war. The MAU is capable of disaster relief assistance, evacuation of U.S. citizens, and has a limited combat capability. However, it is not as combat capable as a brigade and should not be committed into combat as a brigade could be. And this year, again without naming the exercises or dates, we have two brigade-size exercises programed that are the highlights of the year as far as training is concerned and they involve an awful lot of marines from the Atlantic Command.

Senator **Humphrey**. Very well. Unless Senator Levin has further questions for open session——

Senator **Levin**. I just want to say what good news it is that the readiness indicators are so much better. In 1 year I think the direction we are going is just great.

Mr. Chairman, I know you take a good deal of satisfaction in that. I know it is something you have sought. And if we keep going at this rate, we will have all our readiness problems solved within the next 2 or 3 years. So it is the best news I have heard here in a long time.

We are going to tell Senator Goldwater, because he was very, very pessimistic this morning about where we were militarily. He will be happy to hear the new indicators in the Navy at least show that we are doing very much better over just a period of a year or two.

Senator **Humphrey**. I am heartened likewise. But I am very worried nonetheless, as I know you are, Senator Levin. One robin does not make it spring. And there have been competing robins around here for a few years.

Senator **Levin**. Talking about robins, I have one more question. When does your cannibalization curve start to fall?

Admiral **Watkins**. If we have enough manpower to support the funded work packages in the 1983 budget, we should see an immediate turnaround in early fiscal year 1983. These are responsive indicators. They immediately turn around. I would guess by the middle of a year from now we would see a turnaround in the rate of cannibalization actions. This would be one of the greatest contributors to improved morale of the senior technicians in this regard as well, because it is not a good way to run the railroad.

As you know, what we are doing is robbing the home fleet, if you will, and the home air wing. If you were to ask us to do something for you, and the President has asked us to do something for him, we would be somewhat embarrassed to have to look at the home air wings which are not fully ready to go back overseas because of these cannibalization actions.

Senator **Levin**. Would that be your own answer, Admiral Train?

Admiral **Train**. I might be slightly more pessimistic as to when we get well. But essentially, I agree with that.

Senator **Levin**. That was supposed to be a pun, the robin and the cannibalization. I guess I am not going to do better on Friday afternoons.

[Whereupon, the subcommittee recessed, to reconvene immediately in executive session.]

EXECUTIVE SESSION

Senator **Humphrey**. Admiral Train, what are your greatest sustainability concerns?

Admiral **Train**. The most serious sustainability concerns are in the area of threat-oriented ordnance.

Senator **Humphrey**. What does that mean?

THREAT-ORIENTED ORDNANCE

Admiral **Train**. I can be very specific. Threat-oriented ordnance is the very sophisticated, very expensive weaponry such as the Mark 48 torpedo, the Mark 46 torpedo, the Sparrow missile, the Sidewinder missile, or the Harpoon. These are weapons that have extensive internal circuitry that are very expensive to manufacture and expensive to acquire.

For threat-oriented ordnance, we have a formula developed by the Non-Nuclear Ordnance Board which attempts to identify the threat in terms of numbers of ships, numbers of aircraft, numbers of submarines that we might have to fight, and then, looking at the probability of kill of each weapon, assess how many weapons we have to buy to achieve the objective of killing all of that threat.

We then develop an inventory objective based upon that. Our progress toward the inventory objective is measured in a percentage figure. To use one specific example, for Sparrow, the inventory objective is [deleted]. On hand we have in the Atlantic Fleet [deleted] percent. That is relatively typical of our situation across the board. [Deleted.]

Senator **Humphrey**. What does that mean to you as the Atlantic Commander?

Does it mean you are going to have to run from the enemy?

Admiral **Train**. [Deleted.]

Senator **Humphrey**. Yes.

LEVEL-OF-EFFORT ORDNANCE

Admiral **Train**. The other type of ammunition is what we describe as level-of-effort ammunition such as iron bombs, 5 inch projectiles or Walleyes. In this category we measure our health, if you will, in terms of how many days of combat can we sustain.

Senator **Humphrey**. Right.

Before things get too complicated, let me ask you a few questions.

Is there some overall means of measuring stockpiles of these two categories so that you can compare one year against another, average level?

Admiral **Train**. The percent on hand is the figure that will be measurable year by year, yes, sir.

Senator **Humphrey**. That is applied——

Admiral **Train**. That is applied to the inventory objective.

Now, bear in mind that the inventory objective sort of varies from year to year as we change the formula, but the percent on hand is probably pretty valid.

Senator **Humphrey**. What is the trend?

Admiral **Train**. The trend is getting better, and the trend will continue to get better over the next 5 years if you continue to fund the program as you have. By 1985 or 1986 we should be in reasonable shape in achieving our inventory objectives. We are progressing toward that.

Senator **Humphrey**. What are those actual percentages?

Admiral **Train**. For each individual type, Senator? Did you say actual percentage?

I cannot give you an overall percent because the problem doesn't lend itself to that. I can give you each individual percentage, and I will if you wish.

Senator **Humphrey**. That is all right.

Admiral **Train**. I can provide it for the record.

Senator **Humphrey**. I would like to have something.

Admiral **Train**. [Deleted.]

Senator **Humphrey**. Do you have the 1981 or 1982 figures, what you project in 1983? That would be——

Admiral **Train**. I am afraid I do not unless it is back in the box there.

Senator **Humphrey**. Well, you can provide that for the record, or have your people do that, but give me whatever you have.

[The information follows:]

Admiral **Train**. The inventory as of today for both threat-related and level-of-effort ordnance for the Atlantic Fleet is as follows:

THREAT-ORIENTED ORDNANCE

Weapon nomenclature	Inventory objective	On hand	Percent on hand	Shipfills	Notes
		[Deleted.]			

LEVEL-OF-EFFORT ORDNANCE

Weapon nomenclature	Inventory objective	On hand	Percent on hand	Days of combat	Notes
Air—launched weapons:			[Deleted.]		
Gun—type ammunition:			[Deleted.]		
Electronic counter—counter measures (ECCM):			[Deleted.]		
Sonobuoys:			[Deleted.]		

Admiral TRAIN. [Deleted.]

[Deleted] that is [deleted] carrier ship fills. [Deleted], that is about [deleted] carrier ship fills.

Senator HUMPHREY. If you have [deleted] ships and you have [deleted] [deleted] target inventory and [deleted] carrier ship fills, why isn't that [deleted] percent of target? [Deleted.]

ORDNANCE—INVENTORY/PERCENTAGE

Admiral TRAIN. Because you are measuring the number of Phoenix that you require to defeat the threat. The threat, when you are looking at Phoenix, are the numbers of Backfires, Badgers, Bears, and air-to-surface missiles and surface-to-surface missiles that the force may have to defend itself against, and although we have [deleted] carriers, those [deleted] carriers don't drive the threat. So in order to fight a sustained campaign with the Phoenix missile, we would have to have these missiles also carried in ammunition ships so they could keep refilling the carriers.

Senator HUMPHREY. I didn't take into consideration replenishment.

Admiral TRAIN. In the case of NATO Sea Sparrows, we have [deleted] percent. Sea Sparrow itself is at [deleted] percent. Air-launched Harpoon is [deleted] percent. The submarine-launched Harpoon is [deleted] percent. [Deleted.]

The heavyweight Harpoon launched from a cruiser is at [deleted] percent. The lightweight Harpoon launched from hydrofoils is [deleted] percent. The ASROC Harpoon is [deleted] percent. The standard missile, that is the SM-1 and 2, extended range is [deleted] percent. The medium-range standard missile is [deleted] percent. The Terrier is [deleted] percent. The Mark 46 torpedo is [deleted] percent. The Mark 48 torpedo, which [deleted] percent.

Senator HUMPHREY. Now, is there a way of converting that into fighting days under a standard scenario?

Admiral TRAIN. It is difficult to convert the threat oriented ordnance to fighting days, but I can in the case of level-of-effort ordnance.

Intuitively we are talking about maybe a [deleted] day sustained combat capability.

Senator HUMPHREY. That is what you have now.

Admiral **Train**. Yes, sir.

Senator **Humphrey**. In threat-oriented weapons?

Admiral **Train**. Yes, in threat-oriented weapons. That is an intuitive approach. It would be hard to prove it.

Senator **Humphrey**. All right, before we go on let me ask you this. [Deleted.]

Admiral **Train**. [Deleted.]

I am not trying to excuse the decisions that we made in the past; I am just attempting to explain how we got there.

Senator **Humphrey**. You are very forthright, yet your estimation is if the President's budgets are adopted that we will be well in this category?

Admiral **Train**. [Deleted.]

Senator **Humphrey**. You were going to explain about the other category.

Admiral **Train**. The level-of-effort?

The level-of-effort ordnance are iron bombs and bullets, and we measure those in terms of days of combat. Ideally we should fund for [deleted] days of combat, [deleted] days of sustained combat. So, our inventory objective is based upon [deleted] days of sustained combat.

Now, looking across the family of weapons that are included in this level of effort ordnance, we find that in some cases we are reasonably comfortable and can look at [deleted] percent or more, such as the case of [deleted].

So these level of effort figures vary considerably but show us that we have approximately [deleted] days of sustained combat capability, if we use our weapons wisely.

TRANSPORTING ORDNANCE

Senator **Humphrey**. OK, given the shortfalls in both categories, what is your means of moving this armament around rapidly to get it from one part of the world to the other? Do you have a good system?

Admiral **Train**. Well, one of the techniques we employ is to pre-position some ordnance, mostly level-of-effort ordnance. We don't tie up threat ordnance, but level-of-effort ordnance is pre-positioned at such places as Admiral Watkins' theater, in the Indian Ocean, as the maritime pre-positioning ships in the Indian Ocean. In the case of the Atlantic we are in the process of pre-positioning [deleted] in Norway, [deleted].

Senator **Humphrey**. That is under way now?

Admiral **Train**. [Deleted.]

I am told that that is [deleted].

Senator **Humphrey**. You didn't quite answer my question. How do you transport it around in a hurry?

Admiral **Train**. Pre-positioning is one way that we get it forward, to an area where we can match it up with our ships when the ships get into a combat area, or when the Marines get to the combat area. In other cases we can only move it in ammunition ships and hope that we have those ammunition ships in the right place at the right time. That decision can be hedged by hoping that we get a high enough priority on military airlift to move ammunition between theaters as it becomes necessary.

[Deleted.]

Senator **Humphrey**. OK, one more question. Then I want to ask Admiral Watkins to characterize the situation in his theater.

In your opinion, Admiral Train, what about the ability of the industrial base to produce this material in a hurry?

Admiral **Train**. I have a much higher regard and opinion of the American industrial base than some of the other planners who are working on this question, and I am convinced that if we become involved in active hostilities anywhere in the world, that the industrial base will respond. [Deleted.]

Senator **Humphrey**. That is an interesting observation. Is it the mentality or the intent of our naval commanders to hold the fort [deleted]? Is that pretty much assumed?

Admiral **Train**. That is the short war syndrome that I discussed earlier. That is one we must not be captured by. We have to be able to fight virtually indefinitely. What constitutes indefinitely is answered by the question that you just addressed to me. How fast can American industry gear up? [Deleted.] I am not an expert.

Senator **Humphrey**. I understand.

Well, I am concerned not only about our ability to hang in there for more than a short war span, but also your ability to fight aggressively. What about that?

Admiral **Train**. [Deleted.]

Senator **Humphrey**. Well, what is the plan?

Admiral **Train**. The plan is to spend money, the money you have already identified, to fill out threat-ordnance and level-of-effort ordnance shortages over the next 5-years. And the money that is requested in the President's budget and in the 5-year defense plan will achieve that in a responsible way without withholding funds from other programs that are important.

Senator **Humphrey**. I understand. That is not really what I meant.

What I meant was given the shortages of munitions, what are the Navy plans? Are there plans on how you would fight if a war broke out somewhere in the Atlantic tomorrow? Are you under instructions to fight a holding action for warfare or aggressive tactics?

Admiral **Train**. It is very difficult to describe with high confidence to describe a scenario in advance. As we do something our adversary will do something, and then we will do something else.

Over the full range of possibilities, it is important that we, the military leadership, convey to our political leaders what we can and cannot do. [Deleted.]

Senator **Humphrey**. Thank you.

Admiral Watkins, what is it like in the Pacific?

Admiral **Watkins**. Mr. Chairman, I have provided in the classified statement for the record a rather complete summary, I think, of the ammunition situation in the Pacific Fleet, I would just like to add a couple of comments to what has been said.

SHORT WAR PLANNING

We have established a planning objective for level-of-effort ordnance. This is the ordnance designed to neutralize portions of the enemy order of battle which the enemy has the ability to regenerate, the iron bomb kind of ordnance. During the past at least 5 years, and probably more in the post-Vietnam period, the Defense Department set certain objectives. If you could postulate a 14-day war you simply would not need much level-of-effort ordnance. This is a very attractive place to cut war reserve stocks of ammunition. It has always been an attractive place to cut; particularly over the past 10 years when the focus was on a concept of a conflict in central Europe lasting only for a short duration. This concept made a beautiful target for the budgeteers. The statisticians could therefore show you that we didn't need these kind of weapons and these kind of exchange ratios.

When the new administration came aboard it quickly picked up on this and immediately set [deleted]. The desired level today is [deleted] days for the Rapid Deployment Force and [deleted] days for general war.

But realistically, you can't get to those levels overnight. Therefore the administration said: "In the first year, in 1982, we will go to [deleted] days and in 1983 we will go to [deleted] days as our objective." That is where we are now. I have provided some curves in my statement on level-of-effort ordnance to show that the percent of the programming objective for [deleted] days actually on hand is significantly lower than it ought to be. But it is going to get better as we progress through the 5 years of this budget. We will eventually get our level-of-effort ordnance up to the point where it becomes a credible part of our global strategy, [deleted]. This global strategy is the new guidance from the Secretary of Defense. We happen to agree with it and we think it makes a lot more sense than witnessing an analyst's adjustment through ordnance to solve a budgetary problem.

So that is an unfortunate development over the past years. If you ask the question, "How did we get into it; the answer is that you get into it when you postulate away and administrate away a realistic war by insuring one that is only going to last 14 days. Such fallacious analysis is very, very difficult to dig out.

I also pointed out in my statement concerning on level-of-effort ordnance that we have an awful lot of gun ordnance, [deleted]. That is important for near term readiness. Repair of this ordnance is something we do now. I also pointed out in the statement that we have set certain management objectives that says we should only have so much [deleted]. Here again we get into the problems of increasing our ordnance rework facilities. If you don't supply the manpower, if you cut, these degradations are going to happen. That impacts near term readiness. Again, this budget addresses that subject and additional resources are being poured in to get ready-for-issue ordnance faster up to speed.

This situation applies not only in the level-of-effort category but in the threat-oriented weapons as well.

On threat-oriented ordnance Admiral Train gave you some examples. We have almost the identical percentages because, depending on which carriers in the Indian Ocean, from my fleet or his fleet, the balance will shift from time to time. But basically we are the same order of magnitude having only [deleted] percent of what we need in threat-oriented weapons.

In the earlier part of my classified text I gave you a little example of a war game, concerning one of the most significant areas of the Pacific, the Northwest Pacific. The logical Soviet scenario is an aggressive, intensive raid against the carrier battle groups—this is the only way they can do it, and this is the way they practice. So we know what their concepts are. They must come in with such as heavy, intensive barrage that after about [deleted]. This assumes we have [deleted]. We don't think that is unrealistic. We think that is just about the way it is going to happen.

INVENTORY OBJECTIVES

Now, in the process of developing the non-nuclear ordnance requirements, the NNOR, the analyst would tinker with some of the parameters in the equation. For example, in the case of submarine torpedoes, the analysis said that the submarine commander will only shoot one of every four enemy submarines that comes by because his neighbor will also shoot one of every four. We therefore, according to this reasoning, don't need all those torpedoes. So statistically you can cut back your inventory objectives by torquing some of the verniers in the equation. We did that, much to our dismay, over the years.

But again, those are the kinds of things that have pushed us into this position of having inadequate threat-oriented weapons and level-of-effort weapons.

Senator **Humphrey**. In other words, fixing the questions to meet the answers.

Admiral **Watkins**. Yes.

But we are making improvement. I notice in the projections submitted in the 1983 program if you look at level-of-effort in threat-oriented weapons, that we are approaching about [deleted] percent of our planning objective, which would be a prudent [deleted]. We are achieving [deleted] percent of our program objective [deleted].

I have a table of these which I would be pleased to provide for the record if desired. It gives you a direction across the board, everything from gun ammunition to sonobuoys to torpedoes to surface missiles, where this budget takes the Navy. It is in the right direction. We applaud this because we have to do the fighting, and you don't fight the wars with sure shots every time. Many contacts are false contacts, even though we predict engagement outcomes on the probability of kill ratios that we are given. Nevertheless, that is not the way the battle unfolds.

We recognize we are going to meet all of these objectives, and I have the same kind of ship fill problems that Admiral Train has. For example, Phoenix. On [deleted] of my [deleted] carriers I can only put [deleted] assets instead of the [deleted] I need. That means [deleted] back in CONUS have [deleted] aboard.

Here again, we are affecting the improved inventory of our deployed carriers which everybody sees in the daily unit reports.

[Deleted]. We virtually have [deleted] in the Pacific Fleet of threat oriented weapons. [Deleted.]

Senator **Humphrey**. I don't want to go on too much longer, but——

Admiral **Watkins**. We are confident on fuel. We believe the efforts in the last few years to rebuild our fuel tanks overseas and to get our POL storage up to war reserve levels have put us once again on solid footing. We feel fairly comfortable in that area.

Our biggest concern other than ordnance threat and level-of-effort ordnance, is in the area of spares. We have talked a lot about those, and I have some more details in the record. But I must stress that component rework for aviation is very significant. Also the spares support for our ships, which comes through a variety of different funding accounts, must be supported. So must be maintenance of the personnel readiness situation. We cannot allow ourselves to say that we have won that battle so let's cut the budget and freeze their pay again. This is a nonstarter. We would turn the curve immediately downward, and we would soon be back nose deep in the turf where we were. We must give our people some hope. That vital area has got to be maintained.

We must get on with the purchase of the various weapons, because we can do a lot with what we have got available in the fleet today if we have the weapons. That is doable within this budget. We must get on with the other sustainability issues, primarily in support of the logistics, which in general means spare parts. I think clearly with the force level improvements that are coming along, we are on the way.

I do believe we have a sensible defense guidance now that is moving toward developing the real potential for the type of war fighting that to all of us in the military seems more realistic in any confrontation with the Soviets or a Soviet surrogate.

Senator **Humphrey**. Admiral Train, do you want to comment in that regard?

Admiral **Train**. Yes, sir.

While the fuel situation in the macro sense is probably adequate for our needs, there are certain areas where we have limitations, and those limitations are rather significant. [Deleted.] But I didn't want to leave you with the impression that everything is completely all right with our fuel posture around the world. There are some areas we have problems.

Senator **Humphrey**. Let me just wind this up by asking some questions of our Marine Corps commanders.

General Davis, earlier you got into some matters that concerned you about munitions with Senator Levin.

Can you go into that now at some greater depth?

General Davis. Of course, the Navy, Mr. Chairman, furnishes our threat-oriented munitions, and we have the same problems with the [deleted]. I do have some pre-positioned forward in [deleted]. Then they would be out of business unless they get more.

There are [deleted], as a matter of fact, that I could send over.

I think one thing that contributed to getting in this position is that some of these early Sparrows aren't too reliable, so why buy a huge inventory of these when there are already better ones, more than on the drawing board, coming down. [Deleted.] So that is one of the problems.

Then you have shelf-life problems with these kinds of missiles. So that contributes, I think, to this low inventory.

The only other problem—and I think General Schwenk is in the same boat that I am—we are in pretty good shape [deleted]. There are currently [deleted] undergoing extensive maintenance upgrades at the Red River Army Arsenal. This maintenance upgrade is necessary because of the service life of the missile and is a long and extensive maintenance effort. When this upgraded maintenance effort is completed, we will have the missiles available to make up our [deleted] shortages.

The rest of our artillery ammunition, with the exception of some special ammo, is in pretty good shape.

Senator Humphrey. From your point of view, are there any other pressing sustainability problems.

General Davis. Personnel augmentation to flesh out the force is a problem [deleted].

Senator Humphrey. You will have to tell me what that is.

General Davis. Marine amphibious force.

Senator Humphrey. How are you dealing with this potable water problem?

General Davis. I don't know that we've got the number. We are concerned first about the 7th MAB which is tied to the NTPS. We have a good number of the reverse osmosis budgeted this year that will give us a partial capability, and I will see if I can find the figures, and we will provide them.

Then, in the budget years, we should acquire enough of those so that we have got a capability for them.

Eighteen units are scheduled for the 7th MAB by the fourth quarter of 1982, and that will provide [deleted] gallons a day, per man total requirement [deleted]. Those are in the budget as a special allocation from an Army procurement program.

Senator Humphrey. What about chemical protective NVC equipment or apparel. At this point, are your people well equipped?

General Davis. While I look up mine, maybe General Schwenk would like to.

Senator Humphrey. All right, General Schwenk, what are your sustainability concerns?

[The information follows:]

General Schwenk. Attached is a list [deleted].

It is recognized that available assets are insufficient to sustain [deleted].

Attainment considers all equipment maintained by the MAF, and ready for issue (RFP) and reparable equipment maintained by both Marine Corps Logistics Support Bases. [Deleted.]

Summary of mount out requirement by commodity area

Communication/electronics:	
Total number required	
Total number attained	[Deleted.]
Percent deficient	
Engineers:	
Total number required	
Total number attained	[Deleted.]
Percent deficient	
Motor transport:	
Total number required	
Total number attained	[Deleted.]
Percent deficient	

Ordnance:
- Total number required
- Total number attained .... [Deleted.]
- Percent deficient

Principal end item deficiencies

Equipment nomenclature:	*Quantity Deficient*
Communication/electronics equipment:	
Control, radio set	
Control, radio set, AM-6930/FRC	
Radio set, AM/GRC-160	[Deleted.]
Radio set, AN/MRC-110	
Radio terminal set AN/MRC-135	
Engineer equipment:	
Compressor, recip, power driven	
Detecting set, mine portable PRS-7	
Dummy load, generator set, TRLR MTD	
Generator set, SKD-MEP-115A	
Mixer, concrete, KWIK Mix	[Deleted.]
Pump assembly, expedient refueler/M-81	
Refrigerator, prefabricated, 100 cubic foot	
Sweeper, runway, vacuum/ASS32M3	
Water distribution equipment	
Water distribution equipment set	
Water purification unit frame	
Motor transport equipment:	
Truck, cargo, dropside, 5 ton, 6X6, M813A1	
Truck, fire fighting, crash/rescue, M-1000	
Truck, tank, water, 1000 gallon, M50A2	[Deleted.]
Truck, tractor, 5 ton, M-818	
Truck, 1/4 ton, 4X4, GM carrier, M151-A2	
Truck, wrecker, 5 ton, M816	
Ordnance equipment:	
Circle, aiming-M2	
Howitzer, medium, towed 155 MM	[Deleted.]
Meteorological station manual AM/TMO-7	

General **Schwenk**. General Davis alluded to one of them initially when he said [deleted]. When we go to war [deleted]. A majority of it is stored in our major logistic bases at Barstow, Calif. and Albany, Ga. [Deleted.] I am convinced it is not there. There are shortages, and I will provide for the record the various shortages that there are.

Admiral Train mentioned pre-positioning in Norway. The pre-positioning in Norway, and the equipment on the near term pre-positioning ships, are enhancements because of the shortage of strategic lift in the United States. If the maritime pre-positioning ship program goes through Congress, that will be additive equipment, as will the pre-positioning in Norway, if that is fully funded by Congress. That will be additive too, that will be put in, in the case of Norway, in caves, actually, and we would then, in the case of crisis fly a brigade to Norway, marry up with the equipment, and then go to combat.

To answer your basic question, as I mentioned earlier, ammunition, which has been beat to death, is in my mind the primary concern. I also have a brigade committed with General Davis' forces to go to the RDJTF, so reverse osmosis and other water shortage solutions, hopefully, would come to us as well as to him.

My force, manpower-wise is probably in better shape than General Davis'. That is, he has two MAF's, two Marine amphibious forces. I only have one. But as I mentioned in my statement, we are [deleted] in good shape.

We are short technicians, technical NCO's, staff NCO's, and noncommissioned officers, but this was done almost intentionally by the Commandant because of his concern about recruiting and putting the best people he could find on recruiting duty. As a result, we in the FMF suffer shortages in those areas. If we were to go to war, certainly there would be little requirement for recruiters, and all of those people would be returned to us.

So, other than the materiel deficiencies in the war reserve, which I will submit for the record, I think we are in very good shape, Mr. Chairman.

Senator HUMPHREY. All right, fine. Just one last question. What about the NBC apparel?

General DAVIS. During the second quarter of 1981 we conducted a complete inventory, and CMC provided us $2.7 million to fund the identified shortage, [deleted]. Our equipment requirements for FMF, PAC are in satisfactory status right now.

Senator HUMPHREY. Does that mean that each of your men has a whole ensemble?

General DAVIS. All equipment.

General SCHWENK. Yes, sir, we are in the same shape, and we have another problem that General Davis doesn't have, and that is cold weather equipment because of our commitments in Norway, and we are in very good shape there. We have more than a brigade's worth, and we are working toward the full MAF, and there is a lot of money involved in that also.

Senator HUMPHREY. Very good. We will have some questions to submit for you to reply in writing. The record will remain open for 15 days for submission.

[The questions submitted for the hearing record follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY

JOINT EXERCISES

Senator HUMPHREY. Admiral Train, to what extent do joint exercises contribute to the Navy's training program, or do they divert scarce resources from more important training missions?

Admiral TRAIN. The joint exercise program does not divert resources away from other training missions. Rather, they support and enhance our training. These exercises permit us to exercise our joint planning procedures and to exercise and improve existing joint operational procedures. The conduct of these exercises includes training for all levels of command down to the unit level and permits us to practice and rehearse the execution of our operational plans. Of particular importance is the practice these exercises give us at working with our Allies and rehearsing NATO plans.

Senator HUMPHREY. How is the joint exercise program developed from year to year?

Admiral TRAIN. Annually, the Joint Chiefs of Staff promulgate exercise planning guidance which sets the direction for joint exercise planning for the next five years. This guidance provides the national policy and the military strategy which serve as the backdrop for exercises and translates them into prioritized exercise objectives. The 5-year exercise program is then developed with inputs from the unified and specified commanders, specifying which exercises are to be conducted in each year, for what purposes, and by what commands. The joint exercise program insures that essential joint training is conducted and that such training is consistent with programed resources. Atlantic Fleet exercises are planned to ensure they are consistent with the joint exercise plan and our own training and readiness objectives.

MISSIONS PRIORITIZED

Senator **Humphrey**. Admiral Train, how are your assets and missions prioritized in view of the likelihood of ambiguous warning?

Admiral **Train**. As I explained in my testimony, my principal missions are to establish the sea bridge which will permit us to reinforce and resupply our forces and Allies in Europe and to provide forces to adjacent commanders. In performing the first objective, [deleted]. At current force levels, I am only able to execute these missions sequentially and may have my forces maldeployed at the onset of hostilities because of the forces I provide to the Mediterranean and Indian Ocean in peacetime.

Ambiguous warning would complicate my ability to concentrate sufficient force to meet a threat in any area.

Senator **Humphrey**. How will these missions be fulfilled in sequence under a policy of flexible deployment?

Admiral **Train**. The policy of flexible deployment allows us to readjust the deployment of our forces as the priorities of our missions change. These priorities are a function of the world situation and the actions of our likely adversaries.

HOMEPORTING OVERSEAS

Senator **Humphrey**. Admiral Train, what are your views concerning the advantages or disadvantages of homeporting overseas in the Atlantic theater?

Admiral **Train**. The principal advantage of overseas homeporting is that it permits us to maintain a fixed deployment with slightly lower force levels. Its principal disadvantage is that it would remove some of our flexibility.

Senator **Humphrey**. What are the most important considerations bearing on the merit of homeporting overseas at the present time? Political? Economic? Military? Personnel?

Admiral **Train**. As I have just said, overseas homeporting permits maintaining force deployments at slightly lower force levels. The other factors which bear on the situation are that it limits our flexibility to redeploy forces quickly when necessary. It also makes maintenance and logistical support both more difficult and expensive and normally requires an initial capital investment to insure we are able to provide essential maintenance, logistic, and personnel support. In addition, the political situation in many areas precludes overseas homeporting.

Senator **Humphrey**. Short of homeporting overseas, what further access to facilities do you anticipate or desire in the future? South Africa?

Admiral **Train**. I am reasonably happy with our current access to bases. In my area of responsibility, existing U.S. and NATO facilities form a basis for required operational support and are essential. We do not require additional facilities in the Atlantic area. We make port visits and stage aircraft on a case basis from facilities in friendly countries. We have obtained permission to stage occasional flights from facilities in Brazil, Senegal, Barbados, Guadeloupe, and Ascension Island, and we have increased our routine ship visits to West African countries. Nonetheless, coverage of the South Atlantic is sparse and geographically difficult. We operate with friendly forces as a means to increase our operational flexibility and to reduce the likelihood that adversaries will be able to increase their access to facilities in the region.

TRAINING TOWARD CARIBBEAN

Senator **Humphrey**. Describe in further detail the geographical shift in training toward the Caribbean.

Admiral **Train**. Whereas a significant portion of our training used to be conducted in the operating areas off the coast of Virginia, South Carolina, and Florida, we have now shifted the area for such training to the Caribbean. For example, now almost all of our readiness exercises, composite unit training exercises, and amphibious exercises are conducted in the Caribbean area. These are in addition to refresher training conducted at Guantanamo Bay, Cuba, and our use of the anti-air and anti-submarine ranges in the Caribbean which continues as in the past. In addition to providing needed increased United States presence in the area and the increased numbers of port visits which result, this shift in the centroid of our operations allows us to take advantage of the better weather for improved training opportunities.

U.S. BASES IN CARIBBEAN

Senator **Humphrey**. What is the role of Guantanamo, Roosevelt Roads, and other U.S. facilities in this area?

Admiral **Train**. The role of our facilities in the Caribbean has not changed in the sense that they continue to support fleet training in the area. The activities at these bases have increased as we have increased the level of fleet activity in the area. In addition, the increasing threat from Cuba and the general instability in the Caribbean basin have increased the strategic importance of these bases.

STEAMING BUDGET FOR INDIAN OCEAN BATTLE GROUP

Senator **Humphrey**. Admiral Train, some people have sought to add funds to the Navy's steaming budget for the express purpose of maintaining a two battle group presence in the Indian Ocean. What would be the operational and readiness implications of maintaining our presence in this area at two battle groups? Could you explain in detail what you mean by "welcome slack"?

Admiral **Train**. I believe we can maintain our commitments to our friends and Allies and remain the dominant force in the Indian Ocean with the current one-and-one-half battle group level of presence in that area. Going back to the two battle group level would decrease our flexibility to provide increased battle group presence in the Mediterranean, Caribbean, and North Atlantic. We need to have the ability to provide presence at a sufficient level in these critical areas. This is what I meant by "welcome slack".

Due to the lack of maintenance facilities and ports to support our Indian Ocean battle groups, their deployments there demand that we pay more attention to them in terms of maintenance and crew rest upon their return. Increasing the level of deployments to that area again would therefore have a price in terms of training time upon their return to the Atlantic Fleet.

OPTEMPO

Senator **Humphrey**. How would you characterize the OPTEMPO in LANTFLT today?

Admiral **Train**. With reservation, I would say it is qualitatively excellent. We have experienced OPTEMPO gains in Ship Operations and Aircraft Operations in fiscal years 1979, 1980, and 1981. As I noted in my written testimony, a non-deployed OPTEMPO of 28.5 days and 53 days deployed OPTEMPO is budgeted in fiscal year 1983. While this budget reflects a slight decrease in non-deployed OPTEMPO, it will not have a serious effect on our training and readiness capabilities in the near term. In the long term, if we are to sustain a high level of readiness, we must achieve a 31-day OPTEMPO rate for non-deployed forces. Given current fiscal realities, I believe the proposed budget represents a balanced program and is a responsible one.

STEAMING TIME

Senator **Humphrey**. What elasticity remains in the Fleet's ability to absorb more steaming time?

Admiral **Train**. Current deployment requirements result in a ship being deployed one hundred days a year on the average. When inport requirements for training, repairs, maintenance, and crew rest are factored in, there is not too much room to absorb increased steaming time at current force levels. We could achieve 31 to 32 days per quarter for Second Fleet units with current force levels. To achieve the CNO's objective of 34 days per quarter we need to achieve the Navy's objective of a 15-carrier battle group Navy.

Senator **Humphrey**. What is the desired course of action to reduce the strain on Fleet assets?

Admiral **Train**. There are two courses of action which would reduce the strain on Fleet assets: first, reduce deployed operational commitments; or second, increase the number of ships in the force. The first does not seem prudent in view of the world political situation. The proposed program to achieve a 600 ship Navy will have the desired effect in reducing the strain on fleet assets.

SHORE SUPPORT ACTIVITIES

Senator **Humphrey**. What are the principal problems and priorities associated with shore support activities?

Admiral Train. In the area of shore support activities, our principal problems are in the areas of Military Construction, Civil Engineer support equipment, base operations, and facilities maintenance. As new systems and ship classes have been introduced into the fleet, our military construction budget has not kept pace with the need for facilities to support these new units. The backlog of requirements has doubled since 1978 and now exceeds 1.6 billion dollars.

Much of our Civil Engineer support equipment is old and needs replacement. This problem compounds the Military Construction and facilities maintenance problems. Facilities maintenance has historically been underfunded and in a climate of tight budgets continues to suffer. In addition, funding for base operations has been pared to uncomfortably low levels. Should this situation continue for long, it will begin to impact on support for operating forces.

Senator Humphrey. What are your priorities for improving the Fleet's ability to sustain combat?

Admiral Train. My priorities in the Atlantic Fleet are the same as those in the Budget submitted to the Congress. We must increase the number of ships and aircraft available for combat. These platforms must be the most capable and effective that can be provided. They must be supported by the necessary personnel, equipment, spares, and war reserve stockpiles to permit us to sustain combat until we can replace conflict by negotiation. Finally, the shore establishment must be sufficient to provide adequate support for the fleet so it is not the weak link.

Senator Humphrey. Admiral Watkins, what are your principal problems and priorities associated with shore support activities?

Admiral Watkins. A principal problem associated with shore support activities is the funding shortfall in the Maintenance of Real Property (MRP) program. From a level of $203 million in fiscal year 1981, PACFLT MRP funding drops to $178 million and $152 million in fiscal year 1982 and fiscal year 1983, respectively. To absorb the impact of these funding deficits and not destabilize activity work planning for individual shore activity recurring maintenance, most reductions are being taken in the M2 Special Projects program with minimum reductions at the individual shore stations. This will have a significant impact on reducing CINCPACFLT's Backlog of Maintenance and Repair (BMAR) of $123 million, which represents the critical portion of the $438 million to total CINCPACFLT Maintenance and Repair Backlog. The current fiscal year 1982 MRP shortfall will affect major repair projects in priority areas of Aviation Operations, Waterfront Operations, POL/supply/Storage, Troop/housing/Messing and Utilities as tabulated below:

[In millions of dollars]

	Fiscal year—	
	1981	1982
Aviation operation	22	14
Waterfront operations	37	19
POL/supply storage	10	5
Troop housing/messing	11	9
Utilities	4	6
Total	84	53

Projects which will be deferred are runway repairs at Okinawa, Adak, and Alameda; Quaywall and pier repairs at San Diego and Long Beach; UEPH repairs at Guam, Miramar, and San Diego; and utility repairs at Adak, Okinawa, Moffett Field, and Sasebo. These deferrals will impact on projects presently scheduled for funding in fiscal year 1983. The combined impact of these funding shortfalls in fiscal year 1982 and fiscal year 1983 will result in BMAR increases that will degrade shore facility readiness and reverse the trend of BMAR reductions which CINCPACFLT achieved in the last two years.

OVERHAUL EXTENSIONS AND COSTS

Senator Humphrey. Please elaborate on the problems associated with overhaul extensions and costs; component repair; and material control. What factors are driving the problems in these areas?

Admiral **Watkins**. Extension of an overhaul is directly related to increased cost. There are three generic causes for overhaul extensions: inordinately long lead times for procurement of materials, growth in required industrial work, and lack of particular high technology skills. Planning for a ship's overhaul commences several years in advance of the start date in order to determine required work sufficiently early to procure the necessary material. The lead time for material for propulsion equipment and electronic systems is routinely in excess of one year and, for more complex systems, several years is not unusual. Some years past, the Navy was a major customer in many areas of the nation's industrial complex; however, that is no longer the case. Presently, we do not receive either the priority or attention afforded to large, valued customers. In fact, due to the complex contractual arrangements and burdensome requirements placed on government contractors, some have voiced little desire to continue supplying the Navy with vital material.

The second forcing function in overhauls extensions, which later becomes a material procurement problem, is our ability to precisely predict all required work for an overhaul. We have extensive programs such as vibration analysis, pre-overhaul tests and inspection, lube oil analysis, etc., to assist in the planning evolution; however, history would show that, in spite of these efforts, our planning has not been totally effective. The complex nature of a modern warship prevents precise definition of all overhaul work until equipment is opened up for repairs or reconditioning. Historically, we apply a 10 percent growth factor to cover these problems; however, unique situations occasionally arise late in an overhaul where material cannot be obtained or manpower is not available to complete work within schedule and costs estimates.

Third, the complexity I described earlier is placing new challenges on the industrial workforce. There are shortages, as always, in the skilled workforce; however, the high technology equipments installed in our warships are requiring ever higher skill levels in the workforce. Many overhaul schedules have been established based upon available skill levels within a particular trade, i.e., computer technicians and test engineers. That is to say that although gross plant capacity and manpower are available to accomplish an overhaul, specific high technology skills sometimes drive the length of the overhaul. Therefore the slightest problem in such a critical manpower path can cause a schedule extension.

The above factors are present in both public and private sector overhauls. In private sector overhauls there are some unique factors which cause overhaul delays and cost over-runs. The most serious concern is barely qualified/inexperienced contractors who are being awarded ship overhaul contracts. We try to minimize this problem by assigning our nuclear and other more complex warships to the public yards; however, current public yard workload, which is constrained by civilian employee ceilings, has dictated sending some of our complex surface combatants into the private sector. This will further exacerbate an already marginal situation. Although our private contractors have good intentions, I fear they tend to over-estimate their capabilities and under-estimate the cost and schedule. The Navy has a program which addresses these as well as all other private sector overhaul issues with the goal of attaining quality work within cost and schedule.

I can assure you that the Navy is fully aware of the situation and will continue to strive for further improvements. The bottom line is that quality overhaul work required to support sustained combat readiness is being accomplished although sometimes exceeding our cost and schedule estimates. In my assessment, the trend is improving.

OVERHAUL OF ENTERPRISE

Senator **Humphrey**. Please explain recent problems experienced in the overhaul of *Enterprise*.

Admiral **Watkins**: The U.S.S. *Enterprise* overhaul was originally scheduled from January 1979 until September 1980; however, it did not complete until February 1982, a seventeen month extension.

The slip in schedule resulted from problems with the propulsion work and testing package. Most of the definable problems which contributed to the delay involved personnel and organizational problems, inadequate planning, unrealistic scheduling, and poor execution.

Insufficient numbers of properly trained and qualified nuclear personnel resulted in problems throughout planning and execution of the overhaul. Specific shortfalls included insufficient numbers of key shipyard managers and shift test engineers, inexperience in the complexities and inter-relations of *Enterprise* propulsion plants, lack of senior nuclear trained shipyard naval officers, and inadequate quantity of backshift manning and supervision.

From the advanced planning stage, we did not appreciate the complexity of an overhaul of this scope. This was the largest overhaul of any type ship ever undertaken by any naval shipyard. Advance planning and work package definition were driven by how long we thought we could afford to give up the ship, rather than how long the technicians required to do the work. Thus, the total work package was selectively reduced without fully accounting for the complexity of testing required following repair work. The result was an unrealistic schedule. Specifically, the nuclear work package was reduced to the minimum scope possible which resulted in not identifying vital or high probability of failure components whose failure during testing would have a severe impact on the schedule. In retrospect, the total nuclear workload assigned to and accepted by Puget Sound Naval Shipyard was excessive and overwhelmed shipyard production and management resources.

The structure for management of this large and complex project was inadequate at virtually every level until late in the overhaul. No single person below the level of the shipyard commander had overall responsibility for the project. Production and testing organizations functioned independently with lack of on-scene coordination.

Scheduling problems continued from the initial unrealistic schedule. We were slow to recognize the problems in the schedule and adjust for them. Insufficient thought was put into time required for plant repairs, testing, and rework. This led to published schedules lacking credibility at the worker level.

The execution phase was adversely impacted by lack of an objective system for tracking progress at the beginning of the overhaul which subsequently led to poor production performance. Production work was not well integrated with ship's force work resulting in inability to meet the planned machinery test schedule during the later stages of the overhaul.

In summary, a number of problems occurred during the overhaul of *Enterprise*. We are aggressively seeking solutions to them to improve depot level performance and thereby improve nuclear warship readiness.

TOMAHAWK

Senator **Humphrey**. What supply and training activities have been initiated in preparation for receipt of Tomahawk?

Admiral **Watkins**. Integrated Logistic Support Plans, which include fleet supply and training requirements, have been developed and published for Submarine and Surface launched Tomahawk missiles. In addition, a Navy Training Plan was approved on 4 January 1982 and is in the process of being implemented.

Factory training will be utilized to satisfy initial fleet requirements, with subsequent training accomplished at established Navy schools. These courses will commence in the summer of 1983.

HOMEPORTING OVERSEAS

Senator **Humphrey**. What are your views concerning the advantages or disadvantages of homeporting overseas in the Pacific theater?

Admiral **Watkins**. Overseas basing of forces and material is a key element of our Pacific strategy. Western Pacific homeporting is an efficient method of maintaining required forward deployment levels and contingency capability in peacetime while reducing the burden on Navy families. By increasing U.S. presence, overseas homeported ships reassure U.S. allies of our commitment; signal U.S. interest in the security of important areas; and provide a counterweight to the military presence of the Soviet Union. This is sometimes so successful that often our allies almost consider U.S. overseas homeported units as their own.

Ships homeported overseas can operate in theater for prolonged periods, thus reducing the strain of maintaining a high level of presence. In fact, they can maintain a continuous presence even when visiting their homeport. Approximately three ships on a rotation from the continental U.S. are required to provide the same level of presence as one ship homeported overseas. It must be pointed out that this only improves the peacetime posture and flexibility of the fleet. It does not improve warfighting capabilities. However, the cost of additional ships to achieve the same peacetime rotation is many times larger than the cost of overseas homeporting.

Currently fourteen Pacific Fleet ships are permanently homeported in Subic, Yokosuka, Guam, and Sasebo under the Overseas Family Residency Program (OFRP). The *Midway* (CV-41) Battle Group, homeported in Yokosuka, Japan has played a central role in the ability to meet our commitments over the past two years. At the same time, OPTEMPO of *Midway* and other OFRP units has been excessive. Some additional homeported units can provide flexibility to reduce individual OFRP unit

OPTEMPO during normal operations and provide a more capable turnaround ratios of our continental U.S. homeported units.

The major disadvantages of overseas homeporting is that it is dependent upon a favorable political situation and major facilities on foreign soil. The political situation is influenced by a number of variables which are subject to change. Facilities require major investment and can be put at risk by a number of factors over which we have little control. Another disadvantage is the higher cost of moving families to overseas duty stations.

Senator **Humphrey**. Admiral Watkins, what are the most important considerations bearing on the merit of more homeporting overseas at the present time? Political? Economic? Military? Personnel?

Admiral **Watkins**. The major consideration being on the merit of overseas homeporting at the present time is operational. A review of the current forward deployed posture reveals several deficiencies in required peacetime capability and flexibility that can be corrected by increased Western Pacific homeporting:

a. [Deleted.]
b. [Deleted.]
c. [Deleted.]
d. [Deleted.]

A decision on overseas homeporting requires a careful balancing of a number of political and military considerations to decide which candidate ports to pursue. A favorable political climate is essential for homeporting stability and because of the requirement for major facilities on foreign soil. Homeports must be located within a country whose government is stable and whose people are receptive to having U.S. ships with their naval personnel and dependents permanently within the area.

When the Navy weighs the suitability of an overseas location as a homeport, there are several basic criteria which the site must satisfy. Strategic location is one of these. The harbor must be able to accommodate the draft of the ships involved and provide suitable berthing and pierside services such as electrical power, steam, and water. Shorebased support for the maintenance, repair, and resupply of the ships should be convenient and capable of meeting the needs of the vessels and their crews. In order to maintain combat proficiency, both shorebased training facilities and at sea training areas are needed. If an aircraft carrier were involved, an airfield with suitable runways, parking areas, maintenance facilities, and fuel storage would be needed. In addition to the operational requirements of the ships, personnel support facilities (medical and dental care, housing, schools, commissary, etc.) should be in place.

NORTH PACIFIC

Senator **Humphrey**. Admiral Watkins, is the North Pacific considered a soft spot, similar to the South Atlantic or the Caribbean, in U.S. defense planning?

Admiral **Watkins**. [Deleted.]

STRATEGIC ASSETS

Senator **Humphrey**. Please elaborate on any other weaknesses you see in the Navy's ability to cover important strategic assets in the Pacific.

Admiral **Watkins**. I have previously mentioned our inability to simultaneously engage Soviet forces in all Pacific Command ocean areas during a global conflict with the Soviet Union. A balanced increase of [deleted] carrier battle groups is required in our naval forces assigned to the Pacific Fleet as a minimum to enable us to be more flexible in our strategic options. However, even with [deleted] Pacific Fleet assigned carrier battle groups, our basic strategy would still have to be sequential [deleted.] By the phrase "balanced increase," I am referring to a defense in depth which involves effective employment of all sensors, weapons, and systems; flexible offensive capabilities in all warfare areas such as anti-submarine warfare, anti-air warfare, and strike warfare to enable successful operations in diverse geographic and climatic conditions against extremely capable and numerous defensive systems; and mobile logistics support forces to sustain combat operations over the significant distances that exist in the Pacific and Indian Oceans.

Our carrier battle forces enable the Pacific Fleet to sustain a forward conventional defense of the United States and its territories into the waters of Northeast Asia and to protect U.S. interests in Southwest Asia. They are visible forces which provide assurance of U.S. commitment to our Northeast Asia allies without whom a forward would be improbable. Therefore, I consider the addition of these forces to be of top priority. However, I have not yet discussed our weakness with regard to the Soviet mine threat. The Soviets have a very large inventory of mines, many of which are highly sophisticated. We do not know with any certainty how many mines are in the Pacific theater, but their worldwide total inventory of more than [deleted] mines suggests that mining key ports and straits in the Pacific is easily possibly, particularly since virtually all Soviet units are mine capable, including merchant ships. This presents a formidable challenge to our inadequate minesweeping capability.

TEMPO OF OPERATIONS

Senator HUMPHREY. General Schwenk and General Davis, how would you characterize the pace of your exercise and training program? Is it adequate to meet your needs?

General SCHWENK. Sir, I would characterize the pace of the Fleet Marine Force, Atlantic program as brisk, very brisk indeed. The total of operational and joint/combined exercise requirements sharply challenges the capabilities of the one Division, one Aircraft Wing and one Force Service Support Group which constitute the Force to maintain an adequate level of combat readiness through training in the time remaining. We continuously maintain a delicate balance among exercises, training and operational requirements to maintain our combat readiness. While the pace of our exercise and training program is adequate to meet our needs, we could ill afford to sacrifice more training to meet increased exercise or operational requirements and maintain adequate combat readiness.

General DAVIS. Yes, we have a comprehensive program of individual, team and unit training ongoing in each of our commands. Major exercises are scheduled by a variety of senior headquarters and our schedule is full. I do not believe our present tempo of operations could be increased by addition of more major exercises without degrading our essential individual and small unit training.

SUPPORT STRUCTURE FOR FORCE MODERNIZATION

Senator HUMPHREY. What efforts are underway within your command to prepare the support structure for force modernization?

General SCHWENK. Introduction of equipment policies. The policies initiated to support newly fielded equipment are:

a. Structure the Table of Organization with the correct ranks and skills of support personnel.

b. Initiate training for the operation, maintenance and care of equipment.

c. Budget and fund for General Operating Level and Mount Out supplies.

d. Procure initial supply stocks and required support equipment.

General DAVIS. Within FMFPac, the following actions are underway to prepare the support structure for force modernization:

Eight of nine formerly cadred combat service support units have been activated during fiscal year 1982 [deleted].

A new CH-53 squadron, HMH-465, has been activated and assigned personnel are undergoing formal maintenance schooling and on-the-job training. The first CH-53E was delivered during the second quarter of this fiscal year and the next one is due this month. This will enhance our heavy lift capability.

The M-198 155MM howitzer, which increases the range and lethality of the direct support artillery battalion, is scheduled for delivery to FMFPac units [deleted]. New T/Os and training programs are being established to support this new piece of equipment.

The F/A-18 will be replacing the F-4's in the EastPac fighter community commencing with the fourth quarter of fiscal year 1982. Pilots and maintenance crews are undergoing training at Naval Air Station, Lemoore, California and will provide the nucleus for the squadrons involved in the transition program.

In addition, we are participating in ongoing testing and evaluating of research and development efforts and new equipment and tactics. We have approximately 360 Marines, 87 major pieces of existing equipment and 59 aircraft in our present inventory involved in our effort this year. During these tests and evaluations, Marines learn how to operate, maintain, resupply and tactically employ these force modification assets.

PREPARATION FOR FORCE MODERNIZATION

Senator HUMPHREY. What factors, if any, prevent adequate preparation for force modernization?

General SCHWENK. Factors which may inhibit preparation for modernization are:

1. Time involved to recruit and train people, particularly when new technology is involved. Funding is required from MPMC and O&MMC appropriations.

2. Timely provisioning of repair parts, test equipment, technical manuals and publications due to funding or contractural problems.

3. Time involved when maintenance, warehouse, storage or barracks facilities are required. Involves MILCON appropriations.

4. Delivery of aircraft spares. Normally requires 18–24 months from procurement and relies upon prior year funding.

General **Davis**. There are two factors that adversely effect preparation for force modernization, but do not necessarily prevent adequate preparation. The first factor is personnel. Force modernization, whether via procurement of new equipments or upgrading/modifying existing equipments, requires additional personnel to participate in the training for operating, maintaining and resupplying of these modernization efforts. This draw down of personnel from units already experiencing personnel shortages further aggravates our personnel problems. The other factor is money. All too often in our quest to procure new equipments or upgrade existing equipments, the support necessary to keep these equipments capable and combat sustainable is slow in developing. When it comes to a competition for funds, it is primarily a two-fold problem: one, high visibility procurement of new equipment usually surpasses the equally vital, but low visibility, funding for spares and other not so visible support requirements; and two, developing usage data to support the outlay of funds for the spares and support equipment requires several years of experience.

TRAINING ORDNANCE

Senator **Humphrey**. How does the availability of air-to-air and air-to-ground ordnance for training and within the War Reserves compare with that of the Navy? Air Force?

General **Schwenk**. The Fleet Marine Force air-to-air and air-to-ground war reserve and training ordnance is procured by the Chief of Naval Operations and provided to the Fleet Marine Force through the appropriate Fleet Commander in Chief and represents a portion of the total Navy and Marine Corps Fleet requirements. The Fleet Commander in Chief determines the Fleet Marine Force fair share of available assets predicated on data extracted from the Navy Non-Nuclear Ordnance requirements listing which is established by the Navy/Marine Ordnance Requirements model for a particular theatre of operations. Suffice it to say, a Navy wide asset deficiency in air delivered ordnance impacts the Marine Corps and Navy coterminously.

The Fleet Marine Force is an operational level of command and, as such, does not have access to data concerning availability of Air Force air-to-air and air-to-ground ordnance by which a useful Marine Corps and Air Force comparison can be stated. Information of this nature could be more appropriately provided by higher headquarters.

Comparisons of the various services availability of air delivered ordnance notwithstanding, shortfalls exist in selected ordnance items within the Atlantic Fleet. [Deleted.]

General **Davis**. The availability is the same as the Navy's with the exception of air-to-ground munitions, which are expended exclusively by the Marine Corps, i. e., [deleted]. A Department of Defense analysis would have to be initiated to develop comparisons of availability of air-to-air/air-to-ground munitions in the Naval service with the Air Force.

CHEMICAL WARFARE REQUIREMENTS

Senator **Humphrey**. What assets and policies are necessary to meet your chemical warfare requirements?

General **Schwenk**. The physical assets I need to meet my chemical warfare requirements can be broken down into three areas. First, we need a good detection capability. My commanders in the field need to be able to locate the contamination. With this information available, a commander can make logical decisions on troop movements. Next, my Marines need adequate individual protective equipment. In an NBC environment, without protective equipment, other requirements become academic. Finally, we need decontamination equipment and procedures. If we are contaminated, we must be capable of decontamination. Two years ago, a study chartered by the Marine Corps indicated that there were serious problems in all three of these areas. We've come a long way in these 2 years, but we still have a long way to go. [deleted.] In the area of policy, current U.S. policy on the employment of chemical and/or nuclear weapons and JCS policy guidance on that subject, is adequate for my requirements.

General **Davis**. Present policy for chemical warfare in training and exercises is considered adequate. However, in the area of assets, we need reliable chemical detection systems in quantities sufficient to provide coverage to our forces. [Deleted.] We also need to insure that our delivery systems are compatible with these new munitions. We need decontamination equipment in larger quantities for field use. For our primary amphibious assault missions, amphibious ships must be outfitted with detection, protection and decontamination equipment to enable them to support us adequately. We also need adequate casualty care systems to handle the large number of casualties that would be likely on the chemical battlefield.

REQUIREMENTS FOR MATERIAL MAINTENANCE

Senator **Humphrey**. How would you relate your current requirements for material maintenance with the pace of force modernization?

General **Schwenk**. Force modernization includes the introduction of more capable and complex equipment and weapon systems that demand continuous, detailed maintenance management. As the Marine Corps plans for the fielding of these new items, an organized effort is made to identify the requirement for spare part provisioning support, operator and mechanic training and the introduction of specialized tools and test equipment. Depending on the complexity of the new equipment, civilian contractor service support may be provided for the purpose of training Marines on site until they achieve the experience and skills needed to maintain the item on their own. This program is most often utilized in aviation units that receive new aircraft or electronics equipment. Planning for material maintenance on new equipment also includes support after the introduction phase. Depot overhauls, periodic rebuild and modification repairs are typical of the maintenance actions taken during the life cycle of Marine Corps weapon systems. Overseeing all these programs is an elaborate management system that reports on equipment readiness and cost to operate and repair. The judgments and decisions made from this management system have provided this Force with a pool of reliable, effective, combat ready equipment and weapons that have kept pace with current operational requirements.

General **Davis**. Although significant advances are underway, force modernization is still considered to be slow. It is [deleted]. Maintaining old equipment escalates resource requirements and related costs. Equipment breaks down more frequently, requiring more manpower and funding. Down time increases because repair parts are not readily available, having been initially procured and stocked for the equipment's service life. Further aggravating the situation is the requirement for multicontractor procurement. Today, we have new end items in the hands of Marines which cannot be used because we have not received required test equipment, special tools and repair parts. The Commandant is working hard to correct this situation on current procurements. Finally, [deleted]. The lack of equipment rebuild or scheduled service life extension programs exacerbates the resource drain mentioned earlier. In summary, to maintain a ready force, we must act not only to swiftly replace aged and worn out equipment because of the long term resource expenditures, but also to insure that commanders possess the confidence that their equipment will perform at the level required during the rigors of combat.

EC-130Q

Senator **Goldwater**. During fiscal year 1982, the Congress authorized and appropriated $74.9 million for two EC-130Q aircraft. Are these aircraft being procured? Is there a Navy Plan to reprogram some of these funds to start the ECX program?

Admiral **Train**. Funding for two EC-130 airframes during fiscal year 1982 was requested to support mission requirements during the transition to a new airframe. This procurement is expected to take place as planned. I know of no reprograming effort.

Admiral **Watkins**. Senator, as CNO testified on March 3, 1982, the 2 fiscal year 1982 C-130Qs are expected to be procured as planned. Accordingly, these aircraft procurement funds would not be reprogramed into ECX.

TACAMO

Senator **Goldwater**. What is the current approved force level for TACAMO and are you equipped to that level now? At the approved force level, can you provide 100 percent coverage for two oceans?

Admiral **Train**. The Navy currently possesses 14 of the approved force level of 18 EC-130 aircraft. The force level of 18 will provide a capability for one continuously airborne aircraft in both the Atlantic and Pacific. Changes in the threat, national strategic policy, and the increased operational capabilities of the Trident system have expanded mission requirements for TACAMO beyond EC-130 limits. [Deleted.]

Admiral **Watkins**. The currently approved force levels is 18 EC-130Qs, allocated as follows:

Atlantic Fleet (VQ-4)	[Deleted.]
Pacific Fleet (VQ-3)	[Deleted.]
Research and Development (NATC Patuxent River)	[Deleted.]
Pipeline (overhaul, modifications)	[Deleted.]
Total	18

The Pacific Fleet squadron currently has only [deleted] aircraft on board but will have its full complement of [deleted] aircraft [deleted].

This force level is adequate to maintain an aircraft continuously airborne in both oceans. However, in order to maintain communications connectively with both the National Command authority and the Trident submarines, the aircraft must operate at long distances from land. The range limitations of the EC-130 prevent the aircraft from remaining on station for long periods. From this perspective, the current force level of EC-130s is not adequate to provide for future coverage. ECX, with longer range and the ability to remain on station longer, will solve this problem.

EC-130

Senator **Goldwater**. The EC-130 has been in this mission for well over 10 years, dating back into the 1960's. Has the Navy maintained proficiency and accomplished the mission over this period of time?

Admiral **Train**. The EC-130 historically has accomplished the mission well, [deleted]. This record reflects maintenance of proficiency, as does the Atlantic TACAMO record of over 10 years of major accident-free operations.

Admiral **Watkins**. The answer to this question is an unqualified yes. Both the Atlantic and Pacific squadrons have met or exceeded all mission taskings since their commissioning in 1968. The Atlantic squadron has maintained an aircraft continuously airborne since 1974, more than 10,000 hours per year. [Deleted.] They are presently building up to the aircraft and manpower levels needed to fly [deleted] in support of the Trident deployment in the Pacific.

Senator **Goldwater**. The committee has also heard comments that the EC-130 lacks space and range for the future TACAMO mission. This raises three questions: Where will our new mission areas be that are different from previous years; can the EC-130 be modified to carry more fuel and extend its range; is there a longer version of the C-130 that provides more space?

Admiral **Train**. The mission has changed at the direction of the Joint Chiefs of Staff [Deleted] directed continuous two ocean on-station TACAMO operations to support the Trident system by the late 1980's.

The EC-130 can be modified to carry more fuel, but this would aggravate an already overweight condition for the EC-130. This does not appear to be a feasible alternative and has not received serious consideration in the analysis of TACAMO alternatives forwarded by Secretary Weinberger to committee chairman on 25 January 1982.

It is correct that the EC-130 airframe could be stretched to provide additional communications space, but this would add space for expansion at the expense of weight growth. If the EC-130 is to be retained for TACAMO, emphasis should be placed on weight reduction. Stretching the EC-130 was not included in the analysis of TACAMO alternatives.

Admiral **Watkins**. The patrol areas utilized by the Trident differ significantly from those of the Polaris submarine. Essentially the Polaris boats were confined to WESTPAC operating areas as were the TACAMO PAC aircraft which provided the strategic communication support. With the advent of the Trident in the Pacific, [deleted]. Initially, to provide the required connectivity between the NCA and the Tridents, TACAMO PAC will operate [deleted] an area north and east of the Hawaiian Islands extending to [deleted]. As more Tridents become operational, the TACAMO [deleted].

In answer to your second question, the EC-130 can be modified to carry additional fuel; however, this would increase the magnitude of the weight problem we are experiencing. The additional fuel option is not under consideration at this time. It is possible to install an inflight refueling package on the EC-130. The Navy has no large airborne tanker aircraft, so an inflight refueling capability would require the acquisition of tankers by the Navy or the use of Air force assets to provide dedicated tanker support for the TACAMO Mission. An inflight refueling capability would require a major modification to both the current aircraft fueling system as well as the airframe structure for weight and load distribution.

Last, Lockheed Georgia Corp. manufactures a "stretched" version of the C-130. This aircraft is used only by civilian operators. The stretched C-130 has the same range and speed limitations as the military version, with no increased total load-carrying capability. While space is a problem on the EC-130, the more serious problem is that the weight of the installed communications equipment, combined with a full load of fuel, exceeds the design gross weight of the aircraft. Various studies have identified ways of reducing weight on the EC-130, and these were discussed in the analysis of alternatives to TACAMO forwarded by Secretary Weinberger to the Chairmen of the House and Senate Services Committees on January 25, 1982.

Senator GOLDWATER. The committee understands that the ECX program schedule assumes a 1983 go-ahead, with R. & D. concurrent with production, delivery of the first production aircraft in 1987 and the last one in 1991. If this mission is important, and the EC-130 inadequate, why nine years to acquire such a small fleet of aircraft? Are there elements of risk in changing to a swept wing, fan powered, large aircraft that you have not shared with us?

Admiral TRAIN. The development and acquisition of ECX is timed to coincide with the retirement of nine EC-130s. ECX funds requested for fiscal year 1983/84 represent development and long-lead expenditures, with airframe procurement first appearing in fiscal year 1985. Follow-on procurement will then coincide with EC-130 retirements, to provide for extraction of their communications suites and allow maximum amortization of our investment in EC-130 airframes. Two EC-130 airframes and communications suites are being procured in fiscal year 1982 and 1983, respectively, as insurance for mission performance during transition. Although the form of the follow-on aircraft is not known, a number of aircraft are considered competitive. These include a modified C-130. Several swept wing aircraft, such as the B747SP, L-1011, DC-10, and B707-320, were studied and found to be competitive in addition to the C-130. Integration of the proven TACAMO communications suite into an existing, in-production aircraft will minimize program risk and allow ECX deployment on time. All known elements of risk have been provided to the committee chairman in the analysis of TACAMO alternatives.

Admiral WATKINS. The length of the procurement cycle is a concern to many of us. However, availability of funding, the budget review process, stringent R. & D. requirements, long lead and tooling requirements, and estimates of manufacturing capability all combine to slow down and lengthen the procurement process. In many cases, decisions must be made sequentially and are completely dependent on external factors. This is true even for a relatively small and low-risk project such as EXC. As to the TACAMO mission, it is vital. The C-130 airframe has served well and will continue to do so in the near term, but it affords no growth for projected requirements and will not meet future needs in terms of range and endurance, especially in the Pacific. To the best of my knowledge, we intend to procure three EXC per year spread over a period of five years, for a total of fifteen aircraft. The plan for ECX is to transplant the existing, proven TACAMO communications system into an existing, but yet undetermined, aircraft that can meet stated mission requirements. This is considered to be a low-risk venture. Potential risks are of an engineering development nature and mainly involve the interface between TACAMO communications systems and the chosen airframe, such as wiring, cooling, and EMP hardening combined with weight and balance considerations for placement of the [deleted] of communications equipment.

EXISTING COMMUNICATION SYSTEM

Senator GOLDWATER. Do you plan to use the existing communication system on a new aircraft or go into system redesign?

Admiral TRAIN. The ECX aircraft will be outfitted with existing communications suites from retiring EC-130 airframes.

Admiral WATKINS. We plan to use the existing communications system, transplanted into a different airframe.

ECX

Senator GOLDWATER. Can a large, fan powered, swept wing aircraft perform the orbit maneuver and get the results you specify without a new development program for the antenna? Has this capability been prototyped and test flown to your satisfaction?

Admiral **Train**. The verticality requirements for the ECX are the same as for the EC-130. A Naval Air Development Center report found a number of aircraft able to perform the orbit maneuver to achieve required antenna verticality. Antenna drag, a known factor which is compensated for by engine power, is not an appreciable factor. In view of this experience and the low technical risk associated with the orbit maneuver, we are satisfied that prototyping and additional feasibility testing is not required.

Admiral **Watkins**. A large, fan-jet aircraft is capable of performing the orbit maneuver, with the antenna, provided the engines have sufficient thrust. Boeing Aircraft Corporation demonstrated this capability in flight tests in 1981 on a Boeing 707 aircraft equipped with turbo fan EFM-56 engines. These tests demonstrated that aircraft could match the turn radius of the EC-130. This is not an endorsement of the Boeing aircraft, but rather an example of the feasibility of the ECX plan. Other potential competitors would be expected to provide similar demonstrations. To date, orbits with an actual antenna have not been demonstrated, but computer simulations indicate that the existing antenna system will be adequate.

In answer to your second question, no, a prototype has not yet been flown. The concurrent R&D and production program requested in the ECX plan does provide for full prototype development and testing.

Questions Submitted by Senator John W. Warner

CHEMICAL WARFARE CAPABILITY

Senator **Warner**. Gentlemen, what do you regard to be the state of your respective forces to conduct military operations in a chemically contaminated environment?

Admiral **Train**. [Deleted.]

General **Davis**. [Deleted.]

General **Schwenk**. We've accepted the idea that NBC is just another facet of modern warfare, and we're training accordingly. The key, of course, is the realization, by Privates through Generals, that NBC warfare is a possibility. To this end, I've insured that NBC play is incorporated into every exercise. This gives my commanders in the field an opportunity to experience the difficulties inherent to an NBC operation. Also, I've established an operationally oriented NBC readiness evaluation program. This program helps me to identify NBC problem areas within FMFLant and, armed with information, we attempt to correct the deficiencies discovered. In addition, we have an FMFLant NBC Board which meets periodically. This board provides a forum for discussing problems and solutions pertaining to NBC matters. One of the problem areas disclosed during NBC training and evaluation is that of obsolescent equipment. In some areas, decontamination and detection particularly, we are using equipment which incorporates thirty year only technology. In order to ensure that we can continue to do the job in a chemical environment, we need to be equipped with "state of the art" equipment. In summary, we can operate in a chemical environment. We are in much better shape than we were two years ago. Our equipment is somewhat better and our training is better. My goal is to arrive at a level of readiness where we won't lose Marines through a lack of training or a lack of awareness.

CHEMICAL WARFARE

Senator **Warner**. What do you think the prospects would be of them having to do so in a combat situation instigated by the Soviet Union or its proxies?

Admiral **Train**. The Soviet Union views chemical warfare as an integral part of conventional operations. It is expected that they would use chemical agents in a conventional conflict. The chances of our having to operate in such an environment are high. We should be prepared to do so.

General **Davis**. Given a Soviet perception of relative advantage in defensive capability, [deleted]. My understanding of Soviet doctrine is that they expect to operate in a chemical environment and are prepared to do so.

General **Schwenk**. As early as 1962, Soviet Colonel Oleg Penkovsky (an intelligence officer) stated "if hostilities would erupt, the Soviet Army would use chemical weapons against its opponents". The Soviet Army has about 80,000 chemical troops and over 6,000 truck-mounted decontaminating devices. This information, coupled with the empirical evidence from Afghanistan, Laos and Cambodia, leads me to believe that the probability of being engaged with chemical weapons in a future conflict is high.

CHEMICAL DEFENSE POSTURE

Senator **Warner**. How would you rate your forces' chemical defensive posture today? What about that of units designated to reinforce your troops in the event of a war and/or mobilization? How long could your forces maintain an effective chemical defensive posture and at what cost in terms of operational readiness and combat effectiveness?

Admiral **Train**. [Deleted.]

General **Davis**. [Deleted.] Reserve forces are equipped similarly to active forces. Reserve training deficiencies, if they exist, may be able to be made up because they are generally late deployers. My forces can maintain a chemical defensive posture in a contaminated environment [deleted]. The length of time is dependent upon the extent of contamination and the life of expendables such as protective suits and mask filters. Obviously, personnel in protective equipment are less effective than they would be if unencumbered but both defender and attacker are similarly encumbered. I am confident that my forces are as effective as any in the world so long as their protective equipment holds out. Obviously, shelters and decontamination are required to change suits, filters, etc., [deleted].

General **Schwenk**. I'm going to have to answer those questions one at a time. First, we can live and fight in a chemical environment. [Deleted.] Some equipment shortages still exist but these are currently being taken care of. Our NBC training has been greatly intensified, with emphasis being placed on conducting operations in a chemical environment. In order to accomplish the mission, the training spectrum has been broken into five areas that all units must be knowledgeable in. These areas are: decontamination of both personnel and equipment, individual survival measures, control center operations, monitor and survey operations, and practicing their primary mission under realistically simulated chemical environments (i. e., refueling, rearming and launching of aircraft, laying in, loading and firing of artillery). As for our reinforcements, they're not in quite as favorable a position as their active duty counterparts. We have an ongoing program, within Fleet Marine Force, Atlantic, to help the 4th Marine Division and the 4th Marine Aircraft Wing train in NBC defense. I think we're starting to see some improvement. NBC officers have now been assigned and the necessary training of the individual Marines has commenced. [Deleted.] In response to "how long and at what cost" we can maintain our chemical defensive posture, that's an extremely complex issue. When you put people in protective clothing, everything slows down. The simplest task takes much longer than it does in a non-chemical environment. Resupply, Command and Control, rest and recuperation and feeding are only some of the considerations that must be addressed. I'm very aware of these considerations, and I and my staff are actively seeking answers to the questions that these conditions generate.

Senator **Warner**. What is your professional judgment about the degree to which further improvements to our chemical defensive posture alone can be relied upon to deter the Soviet Union or its allies from initiating chemical attacks on American personnel?

Admiral **Train**. I do not believe that defensive measures alone will deter the first use of chemical weapons by the Soviets. However, an effective defensive posture is a prerequisite to any strategy designed to prevent the first use of chemical weapons. Further improvements in our chemical defensive posture will reduce the potential gain to the Soviets from initiating a chemical attack. If, at the same time, we have a capability for retaliatory use of chemical weapons, we can make the risks of initiating a chemical attack outweigh the gains for the Soviets. In this sense, further improvements to our chemical defensive posture are effective in deterring the first use of chemical weapons by the Soviet Union or its Allies against American personnel.

General **Davis**. In my opinion, a creditable capability to detect attacks and sustain our forces in a toxic environment, including our supporting rear echelon forces, will make current Soviet capabilities considerably less decisive, particularly at the front lines where forces are in contact. Lacking a creditable capability to respond promptly in kind would provide any enemy a substantial advantage.

If an enemy perceived his chemical attack would not be successful and may result in escalating the conflict beyond the level at which he is prepared to fight, such as use of tactical nuclear weapons, I think he may be deterred. However, I am not sanguine in thinking that purely defensive improvements will do much to deter any attack.

General Schwenk. I don't feel that a "chemical defense", even much improved, can be relied upon to deter Soviet use of chemical weapons. A basic concept of chemical weapons employment is to use chemicals to force your opponent into a protective posture. On a highly fluid battlefield, an organization suffering the degradation imposed by being in a protective posture is dramatically improved, I believe we can count on our opponents to use chemical weapons in an attempt to "at least" slow us down and degrade our combat effectiveness.

CAPABILITY TO RETALIATE

Senator Warner. To what extent do you believe that a credible retaliatory capability is essential to an effective chemical deterrent? How would you characterize the present U.S. chemical stockpile and its availability and utility to you as a senior commander in the event you should be compelled to use chemical weapons to respond to their use by the enemy?

Admiral Train. A credible chemical warfare retaliatory capability is vital as a deterrent. The probability of a USSR chemical attack increases as their perception of the U.S. capability to defend against or to retaliate in kind diminishes. To deter Soviet use of chemical weapons, we need greatly improved chemical offensive and defensive capabilities to deny the Soviets any significant military advantage they would gain from using chemical weapons and thus reduce the incentive for their use. [Deleted.]

General Davis. In my opinion, a creditable capability to retaliate promptly and in kind is absolutely essential to deterrence. The present chemical stockpile is outmoded, of doubtful reliability, relatively inaccessible, difficult and dangerous to employ and lacking in quick reaction capability. We urgently need the new family of binary munitions which will be reliable, safe to transport and store, and therefore more readily available to combat forces for use when authorized.

General Schwenk. I believe that an adequate chemical retaliatory capability is absolutely essential to an effective chemical deterrent. Our opponent must be assured that we can respond in kind to any chemical threat to our forces. [Deleted.]

BINARY MUNITIONS

Senator Warner. Is it your professional military judgment that binary munitions would provide significant and needed improvements to our present chemical deterrent capability and that the introduction of these weapons is an urgent national defense priority?

Admiral Train. Yes. For all practical purposes, we do not have a deterrent capability. Binary weapons will give us this essential capability.

General Davis. Yes, sir. I consider the introduction of binary munitions to be an urgent national defense priority.

General Schwenk. [Deleted.] In my professional judgment, production and stockpiling of the binary munition is a most desirable course. We not only will be replacing our current stockpile, but, at the same time, would be making a giant step forward in the reduction of the new inherent safety hazards associated with manufacturing, transportation, storage and disposal of chemical munitions. Since the components will not be adjacent to each other until loaded into the projectile, which is near the gun site at a forward combat location, the projectile is completely safe, even from accidental detonation.

TOXIC CHEMICAL AGENTS

Senator Warner. Do you believe that, under present circumstances of U.S. chemical unpreparedness, you would be compelled to advocate the use of nuclear weapons to respond to a Soviet or Soviet-proxy attack upon your forces which employed toxic chemical agents?

Admiral Train. [Deleted.]

General Davis. [Deleted.]

General Schwenk. [Deleted.]

Questions Submitted by Senator Carl Levin

DAYS OF SUPPLY FOR MUNITIONS

Senator Levin. General Davis, your statement says that "our stocks of air-to-air missiles, ground-to-air missiles and anti-armor munitions are critically short.

You apparently favor a "protected [deleted] supply of these munitions".

General **Davis**. I do not advocate a "protected [deleted] supply of these munitions". Ideally, [deleted]. This is necessary because production lines cannot be turned on in time to support requirements any earlier.

Senator **Levin**. What is our current "days of supply" for these munitions?

General **Davis**. Air-to-air missile requirements are based upon a threat elimination factor rather than "days of supply". In other words, air-to-air missiles are procured in quantities required to eliminate enemy aircraft. The inventory of the missiles must be expressed in quantities to destroy the enemy's aircraft and stocked to at least a 90-percent confidence level in relationship to the total projected threat. Air-to-ground munitions vary in days of supply (DOS) [deleted].

30-DAY SUPPLY LEVEL OF MUNITIONS

Senator **Levin**. How soon do you expect to reach the 30-day supply level?

General **Davis**. As I mentioned, threat oriented weapons are not expressed in days of supply. Threat oriented weapons, such as Sparrow and Sidewinder missiles, will reach the required level [deleted] at current budget and production forecasts. Level of effort weapons (air-to-ground, conventional) to achieve [deleted] providing current budget and production forecasts are not changed.

LEVELS OF TRAINING AMMUNITION IN THE FISCAL YEAR 1982 AND FISCAL YEAR 1983 BUDGETS

Senator **Levin**. General Schwenk and General Davis, are you satisfied with the levels of training ammunition in the fiscal year 1982 and fiscal year 1983 budgets?

General **Schwenk**. The overall picture for training ammunition is good. We have more than adequate supplies of small arms, artillery and non-smart air-to-ground ammunition and expect this situation to continue through fiscal year 1982 and fiscal year 1983. The only projectiles that are temporarily a problem are [deleted].

Although I just finished saying that, overall, the level of training ammunition is good, I am concerned about one area. That area is the low numbers of high cost, high technology missiles, both ground and air, available for use in training. As I stated previously TOW and Dragon missile gunners fire [deleted] per year per man. To reduce the impact of this lack of live fire experience, we use a number of simulators, but there is still a significant difference between firing a simulator and firing a real missile. In summary, with this exception, my Force has sufficient quantities of training ammunition to allow us to maintain the required level of readiness.

General **Davis**. In regard to air-to-air and air-to-ground munitions, [deleted] are directly proportionate to the quantities of munitions in the War Reserve stockpiles.

MISSILE TRAINING ALLOCATION

Senator **Levin**. General Schwenk, your statement points out that TOW and Dragon gunners can fire [deleted] per man per year. A Hawk battery can fire [deleted] missiles per year.

Since you consider these levels inadequate to maintain crew readiness, what would you consider an adequate level of live firings per crew member per year to maintain readiness?

General **Schwenk**. As the Dragon and TOW are most difficult missiles for gunners to master, I consider that each gunner and assistant gunner should fire four rounds each year, one per quarter, to maintain readiness. For the TOW missile, this includes a requirement for four firings annually for AH-1T (TOW) helicopter pilots. [Deleted.] I consider this allocation adequate to maintain readiness.

MISSILE COSTS

Senator **Levin**. What is the cost of one firing of each of the three missiles you mentioned, TOW, Dragon and Hawk?

General **Schwenk**. Both the TOW and Dragon inventory include a heat round and a practice round with an inert warhead. Each has identical flight characteristics, so either type round may be fired for training. The cost of both types of Dragon missiles is $2,991 each. TOW missiles cost $4,600 for heat round and $3,250 for the practice round. When firing the TOW or Dragon, there are no extraordinary range or target costs. Hawk live firing is normally conducted once a year when [deleted] missiles are fired. Missiles which have been in the inventory longest are used in order to avoid the cost of rehabilitation or replacement. The estimated cost of this [deleted] missile Firex is $1,417,000 [deleted]. This figure includes the cost of the missiles, targets and target support.

SIMULATED LIVE FIRING

Senator **Levin**. Do new techniques of simulated firing provide an adequate substitute for live firing?

General **Schwenk**. There is no substitute for live firing. Simulated firing complements the gunners' training, but does not provide the necessary realism to achieve full combat readiness. With our TOW simulator, for example, when the gunner fires, a small firecracker device "simulates" missile launching. The gunner then tracks an infrared source on a target board carried by a jeep. While the gunner gets to practice target tracking, he does not learn to cope with the explosive blast of actual missile launching, the associated dust and debris that causes obscuration, nor the distraction of the soaring missile within his sight picture.

Senator **Humphrey**. Gentlemen, thank you very much for your time and your testimony and your patience. I apologize for the length of the hearing. The subcommittee is adjourned.

[Whereupon, at 4:49 p.m., the subcommittee recessed subject to the call of the Chair.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

MONDAY, MARCH 8, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

NAVY FACILITY AND DEPOT MAINTENANCE PROGRAMS

The subcommittee met in open session, pursuant to notice, at 10:15 a.m., in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senator Humphrey.

Staff present: Michael B. Donley and David S. Lyles, professional staff members; and Carol J. Rudolph, staff assistant.

Also present: Jon Etherton, assistant to Senator Jepsen.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning.

The subcommittee meets today to receive testimony on the Navy's facility and maintenance programs for fiscal year 1983.

We are pleased to have with us Rear Adm. James Taylor, Director of Shore Activities Planning and Programing; Rear Adm. James Nunneley, Director of Ships Maintenance and Modernization; and Rear Adm. Richard Martini, Director of Aviation Programs.

The subcommittee has an interest in the living and working conditions of military personnel. We view the issue of facility maintenance as one related to both quality of life and in some cases readiness. Our overall interests lie in assessing the depth of the Navy's facility maintenance problem and understanding how maintenance priorities are established and met.

The problems related to ship overhaul and modernization are more complex. For a number of reasons, the number of deferrals and schedule changes in the ship maintenance area remains high. This is a source of frustration for fleet commanders who need ships and to the Congress which is currently unable to relate resources to a stable program.

The issue at stake is the Navy's fundamental ability to schedule workload, make worthwhile cost estimates and to executive its program.

Finally, in addressing aviation programs we will review the Navy's depot maintenance program for airframes, engines and components. We also seek further clarification of the ongoing dispute between the Navy and the Office of the Secretary of Defense concerning the definition and funding of modification installations.

Because of the unique character of each issue, we will plan to receive testimony and have questions, first with Admiral Martini, then Admiral Nunneley and Admiral Taylor, in that order.

Admiral Martini, will you proceed, please?

STATEMENT OF REAR ADM. RICHARD H. MARTINI, USN, DIRECTOR, AVIATION PROGRAMS DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

Admiral **Martini**. Thank you very much, Mr. Chairman. I have a statement, and if you would like I can make an oral summation, sir.

Senator **Humphrey**. Let me see how long it is. I was not able to read the testimony, since it was not in my office when I left town Friday night, so I really have not had a chance to go over this. Whichever way you feel will be the most effective, Admiral.

Admiral **Martini**. Sir, I certainly appreciate the opportunity do discuss our aircraft maintenance organization with you. I will give a very short summation, if you like.

Senator **Humphrey**. Fine.

NAVAL AVIATION MAINTENANCE

Admiral **Martini**. The naval aviation maintenance program is really divided into three levels of effort. The first is the organizational level which involves the maintenance work that goes on in our squadrons, and includes the checking of the aircraft, corrosion control, and removal and replacement of equipment.

The next level is the intermediate level and this primarily involves calibration, alinement, and repair of removed components.

Finally, the most complex is the depot level. This involves the types of work that are beyond the capability of intermediate level maintenance.

The depot level is under the general direction of the Naval Aviation Logistics Center at Patuxent River, Md., which carries out policy decisions made by the Naval Air Systems Command, Chief of Naval Material and Chief of Naval Operations.

To perform depot level maintenance, we have six naval air rework facilities, two in California—one at North Island near San Diego, and one in Alameda in the San Francisco Bay area; one at Cherry Point, N.C., two in Florida, one at Jacksonville, and the other in Pensacola; and in Virginia at Norfolk.

I think a common belief is that all the naval air rework facilities do is general overhaul. Actually, they branch out into many other areas. They design and fabricate components that are no longer in production. They serve as a source of engineering and technical support for the intermediate level and for the squadrons. Really, they are a nucleus of aviation engineering and technical expertise in the Navy.

At the rework facilities we cover five major areas—airframes, engines, components, installation of modifications, and aircraft support services—support to the fleet.

I think the first three—airframes, engines, and components rework—are self-explanatory. The modification installations are pretty much what the name implies. The majority of aircraft modifications are, in fact, installed at the rework facilities as part of the depot maintenance program. Finally, support services are designed to provide assistance to the fleet when a peculiar problem difficulty arises.

That is a general overview of the aviation maintenance program.

There were two other issues which I included in my original statement.

MOBILIZATION AND COMBAT SUPPORT PLAN

The first is an ongoing study which is two-thirds completed now, the title of which is "The Aviation Depot Maintenance Mobilization and Combat Support Baseline Plan." Fundamentally, it is an indepth look at what rework capability we need to support those requirements we would see under mobilization of wartime conditions.

The other is a study we have entitled "The NARF Modernization Study." Essentially it is what the name implies—a look at what we have to do to make our rework facilities more efficient, as efficient as we can get them to accomplish our mission.

I will now certainly answer any questions which you have, sir.

[The prepared statement of Admiral Martini follows:]

PREPARED STATEMENT OF REAR ADM. RICHARD A. MARTINI, U.S. NAVY, DIRECTOR, AVIATION PROGRAMS DIVISION FOR THE NAVAL AVIATION DEPOT LEVEL MAINTENANCE PROGRAM

Mr. Chairman and distinguished Members of the Committee: I am privileged to appear before you to present a brief discussion of the Naval Aviation Depot Level Maintenance Program.

I will discuss the overall structure of aviation maintenance facilities and activities fit into this framework. I will also address current and projected depot work loads, related manpower requirements, carry-over procedures, modification installations, pricing policies, and facility modernization issues.

The Naval Aviation maintenance structure is divided into three main categories:

The organizational (squadron) level is responsible for aircraft servicing, inspections of installed equipment, functional testing, cleaning, minor corrosion control and replacement of faulty components and associated hardware.

The intermediate level is responsible for calibration, alignment and repair of removed systems and components (e.g., avionics, power plants, etc.), metal machine work and other light industrial functions.

The depot level is responsible for repair of faulty components beyond the capability of intermediate level activities, rework and repair of aircraft structures including power plants, installation of aircraft modifications, emergency repair (either within the depot facility or by use of field teams dispatched to fleet activities) and other heavy industrial functions where economies of scale can be realized by centralization of effort. Rework is accomplished by organic Navy facilities, through interservice agreements with Army and Air Force activities and by commercial contractors.

Depot level maintenance efforts are coordinated and directed by the Naval Aviation Logistics Center (NALC) at Patuxent River, Maryland. Policy formulation and budgeting responsibility for depot level maintenance rests with the Naval Air Systems Command, the Chief of Naval Material, and the Chief of Naval Operations.

For the performance of organic depot level maintenance, there are six Naval Air Rework Facilities (NARFs), located in four states:

California, with approximately 4,500 civilian employees at NARF Alameda and over 5,700 civilian employees at NARF North Island; North Carolina, with approximately 2,700 civilian employees at NARF Cherry Point; Virginia, with over 4,500 civilian employees at NARF Norfolk; and Florida, with approximately 3,000 civilian employees at NARF Jacksonville and over 3,400 civilian employees at NARF Pensacola.

The NARFs possess the capability to inspect, repair and rework a wide range of aircraft, engines and associated components. Proper scheduling of NARF work load is a critical factor in operating a responsive and cost-effective depot maintenance program. NARF induction schedules are designed to ensure that work load is distributed among the facilities for maximum economy of operations within existing capabilities. Inductions are frequently adjusted to accommodate changes in fleet operating schedules. The result is a dynamic and iterative work load scheduling process designed to balance industrial capabilities with operational requirements.

NARF support for the fleet, however, is much broader than just repair and rework. The NARFs also act as designers and fabricators of systems, components and interface units to fill urgent fleet requirements which cannot be satisfied by commercial vendors in an expeditious manner. They provide engineering support for systems no longer by contractors, and perform on-site aircraft inspections, support equipment (SE) repair and calibrations and field modifications in cases of operational necessity, expedience or economic advantage. Thus, the NARFs are the nucleus of the Navy's aviation technical and industrial base. When supplemented by interservice support as well as a vast network of commercial contractors, they provide the capabilty to fulfill the Navy's requirements for aircraft rework and related aviation depot level maintenance support.

The Aircraft Rework Program is divided into five major categories: airframe rework, engine rework, component repair, modification repair, modification installation and aircraft support services.

For all categories, requirements are translated into the resources necessary to accomplish the work, priced in accordance with direction from higher authority and constrained to conform with facility, manpower and funding limitations. Requirements which cannot be accommodated due to these limitations are carried over as backlog into the next fiscal year. Fleet priorities as well as relevant program and fiscal guidance are used to place emphasis on specific areas. This emphasis can be broad (e.g., fully funding the components repair program) or narrow (e.g., setting up special teams to solve a particular problem). We also determine where the work should be done (i.e. in our own Navy facilities, by another service through an interservice agreement, or by a commercial contractor). This determination takes into consideration the criticality of the item involved as well as the availability of required equipment and skills.

Inadequate funding of rework requirements results in degradation of fleet readiness. For airframes, it affects the number of aircraft on extension. An aircraft is on extension if it is not inducted for rework at the end of its normal operating period. For engines, the impact is measured in the number of bare firewalls. A bare firewall is an empty aircraft engine compartment due to a shortage of ready-for-issue engines. Component rework deficiencies result in lack of replacements for failed components which can ground an aircraft or degrade its mission performance. For aircraft support services and modification installations, the impact is reflected in modification kits not installed and system capability not attained.

Airframe rework is the general term that describes depot level maintenance of Fleet aircraft, including both the aircraft structure and selected airframe systems. Airframe rework encompasses the following: Standard Depot Level Maintenance (SDLM), emergency repair, modifications, field inspection, conversions, mid-term inspections and crash damage. The program is structured to maintain a safely flyable airframe at minimum cost over the useful life of the aircraft by periodic return to a depot level maintenance activity. In establishing the interval between depot level maintenance visits, a balance is maintained so that the airframe will not deteriorate beyond the point of economic rework and yet will not be inducted into rework prematurely. In this regard, the Navy has developed and implemented the Analytical Maintenance Program (AMP) in order to accomplish only those scheduled maintenance actions which can be technically justified and are cost-effective. A summary of airframe rework program funding follows:

AIRFRAME REWORK

[Dollars in millions]

Fiscal year	Requirement	Constraint	Carryover	Percent funded
1981 (actual)	$319.5	$318.2	$1.3	99.6
1982 (estimate)	379.4	355.9	23.5	93.8
1983 (estimate)	347.4	347.4	0	100.0

Engine rework includes the repair, modification and overhaul of aircraft engines, gearboxes and torquemeters installed in naval aircraft. The program is structured to maintain sufficient ready-for-issue engines, gearboxes and torquemeters to support the Navy flying hour program. Projections of the number of engines requiring repair are based upon planned aircraft engine operating hours and statistically projected engine failure rates. A summary of engine rework program funding follows:

ENGINE REWORK

[Dollars in millions]

Fiscal year	Requirement	Constraint	Carryover	Percent funded
1981 (actual)	$194.0	$180.8	$13.2	93.2
1982 (estimate)	216.3	195.0	21.3	90.2
1983 (estimate)	190.6	190.6	0	100.0

Component rework accomplishes the repair, modification and overhaul of aeronautical components at the depot level that are beyond the capability of intermediate level maintenance activities. These items include avionic, navigation, instrument, hydraulic, mechanical, airframe and engine components as well as aircraft armament systems and support equipment. Engine component rework includes those repairables required for support of the Engine Analytical Maintenance Program (EAMP). Also included in this category is contractor repair of components for newly acquired aircraft systems and equipment before they are supported with organic assets. Component rework requirements are based upon projected flying hours, historical usage rates, mobilization requirements, safety levels and projected additions and deletions of items from the supply system. Data generated by these sources are integrated and summarized as component requirements through use of a formula approved by the Office of the Secretary of Defense.

A summary of component rework program funding follows:

COMPONENT REWORK

[Dollars in millions]

Fiscal year	Requirement	Constraint	Carryover	Percent funded
1981 (actual)	$734.5	$709.8	$24.7	96.6
1982 (estimate)	705.2	690.8	14.4	98.0
1983 (estimate)	842.0	842.0	0	100.0

Modification installations improve the combat effectiveness of naval aircraft systems through incorporation of operational and safety oriented modifications in existing naval aircraft. In addition, special modifications are frequently installed to strengthen structures or to extend the useful service life of structures beyond existing engineering specifications. Requirements for the aircraft modification installation program are generated by the Operational Safety Improvement Program (OSIP). The Aircraft Procurement, Navy (APN) appropriation procures modifications kits which effect necessary operational and safety improvements to the aircraft systems. The cost of labor and material needed for the installation of these kits is funded in the Operations and Maintenance, Navy (O&MN) appropriation. Individual aircraft modification installation funding requirements are based upon modification kit inventories and procurement schedules. A funding balance between kit procurement and kit installation funding is essential for orderly execution of this program. A summary of modification installation program funding follows:

MODIFICATION INSTALLATIONS

[Dollars in millions]

Fiscal year	Requirement	Constraint	Carryover	Percent funded
1981 (actual)	$147.7	$139.5	$8.2	94.5
1982 (estimate)	236.4	182.3	54.1	77.1
1983 (estimate)	317.2	214.4	102.8	67.6

Aircraft support services involve support rendered by depot level maintenance activities to the fleet. The objective is to provide immediate assistance for the correction of support problems uncovered during fleet operations. Subprograms under aircraft support services include aircraft preservation, customer services, salvage and a limited amount of fleet training. Requirements are based upon historical demand data adjusted for flying hours, complexity of aircraft and projected fleet operational commitments. A summary of aircraft support services program funding follows:

AIRCRAFT SUPPORT SERVICES

[Dollars in millions]

Fiscal year	Requirement	Constraint	Carryover	Percent funded
1981 (actual)	$50.9	50.3	0.6	98.7
1982 (estimate)	61.6	55.7	5.9	90.4
1983 (estimate)	55.3	55.3	0	100.0

Aircraft rework requirements are dynamic and frequently change between development and execution of the budget. These changes occur as a result of adjustments to force levels and flying hours as well as emergent problems with aircraft, engines or associated equipment.

The aviation depot maintenance budget data for fiscal year 1983 reflects full funding of Navy airframe, engine, and component rework requirements which were validated during the DOD budget review process. Although installation of modifications is not displayed as depot maintenance, most modifications are installed concurrent with aircraft rework. Consequently, the budgeted backlog in modification installations will necessitate rebalancing depot maintenance funds during execution. In addition, the Navy's experience to date with execution of the fiscal year 1982 depot maintenance program indicates that aircraft rework requirements will probably be higher than those projected in the budget. To the extent this trend continues, fiscal year 1983 rework deficits will result.

In closing, I would like to discuss two important efforts which are directed toward improving our capability to meet mobilization surge requirements and future technology advances. The first of these is the Aviation Depot Maintenance Mobilization/Combat Support Baseline Plan. This is an intensive effort undertaken by the Navy to define the minimum level of organic industrial capacity and manpower required to support mobilization/wartime contingency operations, maintain technical competence and satisfy the peacetime needs of naval aviation. Currently in the final stage of development, the Baseline Plan is expected to resolve a multitude of issues concerning requirements for NARF capability, capacity and manpower.

An important related endeavor is the NARF Modernization Study. This study will utilize Baseline Plan results to assess current NARF capabilities and develop a comprehensive NARF Modernization Plan tailored to identified requirements for organic industrial capabilities. Together, the Baseline and NARF Modernization Plans will provide the blueprint for ensuring that we can adequately support the present and future needs of naval aviation for depot maintenance in both war and peace.

I thank you for your attention and support of this vital program.

Senator HUMPHREY. I would like to acknowledge the presence of Admiral Klein, who is here to advise you if you need his service in the O. & M. area of the Navy budget.

What are the problems at the depot maintenance level, Admiral?

Admiral MARTINI. From a problem standoint, I think there is one thing I could say which perhaps is not a problem. In 1983 we have a balanced program at the rework facilities. I think the problems of whether we have sufficient NARF personnel and modernization of the facilities are right at the top of our list.

Senator HUMPHREY. What I mean is, what is your backlog and what are the trends? Do you have a backlog in depot maintenance?

Admiral MARTINI. The funding for fiscal year 1983, at the time that the budget was put to bed, fully funded the requirements that were validated through the budget review cycle. I think this is what you are referring to, Mr. Chairman.

There was some difficulty and I think we still have a point of contention between Navy and OSD, on the installations of modifications. This work has been and still remains primarily in the rework area. The issue is that it has been categorized by OSD as modernization rather than rework, so we have a difference of opinion there.

We have a deficiency of about $102.803 million at this time.

Senator HUMPHREY. Deficiency in what?

O. & M. NAVY DEFICIENCY

Admiral MARTINI. In Navy operation and maintenance, funds required to install the modifications, not improvement funds to buy them, come from the Navy aircraft procurement funds.

Senator HUMPHREY. In the 1983 budget?

Admiral MARTINI. Yes, sir, in the 1983 budget.

Senator HUMPHREY. It is anticipated in the budget that they have been purchased already?

Admiral MARTINI. Yes, sir.

The problem area is, in fact, in the installation because it is so logical and, I think, cost effective to do these installations when the aircraft is going through the depot rework process. We will have to make some adjustments so that we can continue to do them. It does not make sense to postpone these installations.

Senator HUMPHREY. I recall now. It is a policy difference?

Admiral MARTINI. Yes, sir.

Senator HUMPHREY. If it is any comfort to you, I agree with your point of view.

Admiral MARTINI. Thank you.

Senator HUMPHREY. Let us go to the other end of the pipeline, and go back to the squadron. What are the maintenance problems that your people are having in the O. & M.N. area? Do you have numerous aircraft out of service because of backlog in parts and work, and so forth? What is it like?

Admiral MARTINI. No, I don't think we have a large number. Beyond the O. & M.N. standpoint, we have a large spares procurement program going on to insure that necessary spares are readily available at the squadron for maintenance support.

Senator HUMPHREY. When will that be solved, for instance?

Admiral **Martini**. We anticipate that our last buy of spares for this special program will be in 1985; however, we do not expect completion of material deliveries until about 1987.

In the squadrons I think one of the problems which is now rapidly turning around is the requirement for skilled petty officers at the midgrade level. I think that has been a problem in the past, but the evidence that we are seeing now shows a really significant turnaround and move in the right direction.

Senator **Humphrey**. If you will, characterize for me the naval aviation status of readiness with respect to maintenance; where do we stand, where have we been and where are we going?

Admiral **Martini**. I think we are going in the right direction, Mr. Chairman. The direction and the trend of mission-capable airplanes which, to me, is really the bottom line, has been a gradual move upward.

About 1 or 2 years ago we changed our reporting system to a new, more accurate and, frankly, more rigorous and demanding reporting system, which caused a slight perturbation, but in all of the cases the movement has been in an upward direction. I think that has been in a large part due to a recognition on the part of you and your colleagues as well as people in the Navy and OSD, that readiness had to take on greater importance.

We have seen that in the emphasis in funding for rework right across the spectrum in the maintenance area, and we have also seen it in the associated area of spare parts. It is all one package. That, I think, has been probably the primary indicator, an increase in funding due to a realization that this is extremely important.

Senator **Humphrey**. What are the yardsticks you use? I am trying to get a concrete sense of where we have been and where we are going. What are the yardsticks you use to indicate efficiency in this area?

MISSION-CAPABLE AIRCRAFT

Admiral **Martini**. We have a number of yardsticks. First and foremost perhaps is mission-capable aircraft, which as I said earlier, is the bottom line for how we are doing and is the reflection of the ability of an aircraft to go out and do at least one, perhaps all, of the tasks that are assigned to it.

Last year we were at about 59 percent. We are looking for about 60 percent this year, and for fiscal year 1983 about 62 percent mission-capable aircraft. We think it should be better. Our goal is 70 percent.

I think it is promising, in fact, that the trend is upward and we project it to continue upward.

One of the other indicators we have is the number of airframes that are on overhaul extension. This is the percent of our aircraft inventory which is still in the fleet being operated beyond the date at which we had projected it should go through depot-level rework. Our goal is 6 percent.

We are projecting for fiscal year 1983 to be at about 6.4 percent. In 1982 we are looking for about 9 to 9.5 percent; so, again, sir, the trend is going in the right direction, coming down. We would hope to maintain it in that direction.

Now, we don't program for zero in this, or in any of our other mission indicators, or for what I should say is a perfect situation.

Another indicator is bare engine firewalls, an indication of a lack of aircraft engines because of not being able to produce sufficient ready-for-issue engine. We have established as a goal here 36 percent.

Senator HUMPHREY. Thirty-six percent as a goal?

Admiral MARTINI. I am sorry, 36 bare firewalls.

Senator HUMPHREY. What would that be as a percentage?

Admiral MARTINI. A little better than 1 percent. As I recall, it is established reflecting aircraft engine readiness for 99 percent of our frontline aircraft, and 98 percent of our support-type aircraft.

As I started to say earlier, in none of these do we try to achieve a perfect situation. In other words, no bare firewalls and no aircraft on extension or, for that matter, 100 percent mission capability. Engines perhaps are an easier example. There are always situations where you have problems with some engines that are not amenable to an influx of repair money, where you have an engineering or a technical problem which may demand the redesign of certain components.

The 36 bare firewall goal is a reflection of those types of situations.

Senator HUMPHREY. Then you are indicating a slight improvement?

Admiral MARTINI. Yes, sir.

Senator HUMPHREY. What were the problems to begin with?

Admiral MARTINI. In the bare firewalls, I did not give you the statistics. In 1982 we are looking for 66 bare firewalls. In 1983 we are projecting 36 bare firewalls. I think the improvement in all of these areas reflects my original statement that greater emphasis is being placed on funding those areas that are readiness related. I have no question in my own mind that is the reason.

Senator HUMPHREY. What is your point of view on the argument whether or not it is possible or efficient to have zero backlogs at depot maintenance facilities? Is it more efficient to plan a small backlog?

Admiral MARTINI. I think, Mr. Chairman, that it is a fact of life that you will have a backlog. When I say backlog, I am speaking to perhaps 6 percent aircraft on extension and 36 bare firewalls. I just think that when we have reached that point we are looking at a curve that is flattening and that the cost to bring it to zero would be prohibitive.

There will always be situations when you can't get aircraft back for rework, when the engine requires other types of work. I don't think that it is practical to aim for zero. When we speak of fully funding this program, we in fact are saying funding it to achieve 36 bare firewalls, 6 percent aircraft on extension, and 85 percent supply material availability.

Senator HUMPHREY. Let us proceed to Admiral Nunneley.

STATEMENT OF REAR ADM. JAMES K. NUNNELEY, USN, DIRECTOR, SHIPS MAINTENANCE AND MODERNIZATION DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS, DEPARTMENT OF THE NAVY

Admiral NUNNELEY. Mr. Chairman, I have submitted a rather lengthy statement. I would like to extract from that for emphasis and concentrate on the questions posed by the committee.

SHIP OVERHAULS AND MODERNIZATION

While my subject is entitled "Ship Overhauls and Modernization," it is important to note that ship overhauls are but one element of the Navy's ship maintenance and modernization program.

To properly address this program, one needs to understand the ship maintenance strategy of the Navy which includes three levels of maintenance; namely, organization, intermediate, and depot levels.

The Navy's ship maintenance and modernization program has two basic objectives: First, to maintain an adequate material condition in the fleet and thus provide the maximum number of ships available for operations at sea; second, to modernize existing ships in order to enhance their capability so that they can counter current and projected enemy threats.

Further, our policy dicates that the required maintenance and modernization work should be performed at the lowest effective level of maintenance throughout the life cycle of the ships.

The program which implements this policy is characterized as a balanced approach to maintenance and modernization. It requires a contribution from each of the three levels of maintenance within the Navy.

The lowest level is the organizational level, consisting of the ship itself and the sailors on board the ship. It is well to remember that on board ship, unlike most other organizations, sailors not only operate the equipment but also are charged with some responsibility for maintenance. This is necessary to insure that the emergent repairs can be made by our sailors when ships are operating far from shore support facilities.

The shortage of experienced uniformed personnel in the fleet—currently 20,000 petty officers in fiscal year 1982—is adversely affecting organizational maintenance and forcing some of it to be transferred to a higher level.

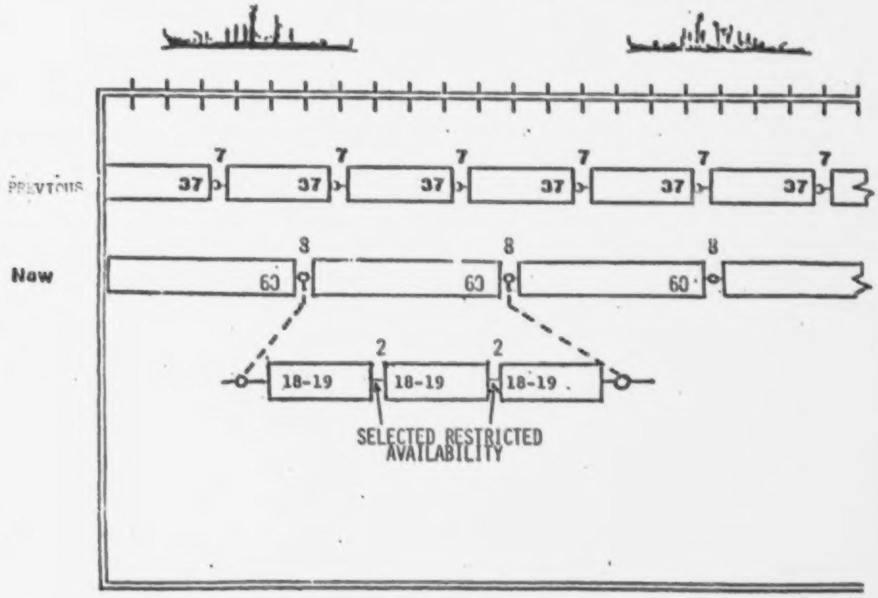
Next is the intermediate maintenance level, consisting of our tenders, repair ships and shore intermediate maintenance activities, wherein sailors with specialized skills assist shipboard personnel by accomplishing intermediate-level repair work, which is essentially work beyond the capability of the ship's personnel.

The highest level of maintenance is the depot level, consisting of Navy and commercial shipyards performing conversion, alteration, and repair work on Navy ships. In general, the workload is assigned to these specific levels on the basis of the capabilities at each level and the extent of work required.

By a balanced program, we mean that throughout the operating cycle of a ship, maintenance tasks are divided among the three levels in order to achieve the highest possible operational availability for resource investment made.

It is essential that the operational availability of the Navy's limited ship assets be maximized. This next slide illustrates one of the techniques we are using to accomplish this.

Destroyer Engineered Operating Cycle



The use of an engineered operating cycle. Under a conventional cycle, a ship would operate for a period of time after an overhaul, shown here as 37 months, before entering a shipyard for the next overhaul. In an engineered cycle the period between overhauls is extended—to 60 months for a typical destroyer, as shown here.

To insure that adequate material condition is maintained over the longer period, selected restricted availabilities of about 2 months duration are planned, that is nondeployed periods. These new, longer cycles are increasing the time over which the ships can be operated without interruption.

Another variant of the engineered operation cycle, EOC, is the phased maintenance program currently being applied to the Atlantic Fleet combat stores ships operating out of Norfolk. There are only three of these ships in the Atlantic Fleet and there is a requirement to maintain one ship on station in the Mediterranean at all times.

These ships have been placed in a program which features a 5-year operating cycle with a 4-month reduced-scope overhaul at the end of that period.

Depot availabilities are also scheduled following each deployment. This program also utilizes the port engineer concept of management in that civilian port engineers are assigned to the operational commander's staff.

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For new ships, such as the CG-47 class, the engineering necessary to support an EOC program is being accomplished during construction.

I will discuss briefly the fiscal side of ship maintenance and modernization and further be responsive to the committee's request that I address the Navy's pricing policy on ship overhauls.

The process of determining our funding requirements begins far in advance of the budget submission and, of course, well in advance of inducting individual ships into the overhaul schedule in the year of execution.

The central point of focus for determining ship overhaul requirements is at the type-commander level. Each type commander is staffed with personnel who are assigned responsibility for the material management of ship types—for example, the frigates, carriers, and submarines. Throughout the operating cycle, these personnel maintain familiarity with specific problem areas on individual ships under their cognizance. They also stay in close communication with the ship's commanding officer and crew who maintain an automated data base of material discrepancies on systems and equipments to be corrected at each of the three levels of maintenance.

For a scheduled overhaul it is the responsibility of the type commander and the ship's force to develop the repair package. This is accomplished by selecting items requiring accomplishment from the automated file and by identifying additional work through the use of a series of preoverhaul tests and inspections.

Similarly, the modernization package is developed through the coordinated efforts of the type commander staff, the commander, Naval Sea Systems Command and the Chief of Naval Operations, well before the commencement of the overhaul.

Following completion of the preoverhaul tests and identification of the modernization package, all requirements are integrated in a preliminary work package. This coordinated package is provided to the accomplishing naval shipyard or supervisor of shipbuilding who estimates the cost involved in accomplishing the specified work.

The proposed repair package then becomes the subject of a work definition conference conducted with the type commander, ship, PERA, and accomplishing activity in attendance. The results of this conference then form the authorization repair package and the estimated price to accomplish the defined work.

With respect to the workload in the private shipbuilding and ship repair industry, the number of employees, as recorded by the Bureau of Labor and Statistics, increased from 166,000 in 1979 to 176,400 at the end of November 1981.

Although we have traditionally assigned our more complex warships to naval shipyards—the proportion of complex warships in the fleet has been increasing since the mid-1970's and it is clear that more complex ships will go to private shipyards for overhaul. The Navy recognizes that positive action will be required for shipyards to develop the necessary experience, skills and facilities to perform complex ship overhauls on a routine basis.

In April 1981, we conducted our first annual private sector overhaul planning conference to develop a comprehensive plan for future private overhauls.

It takes into account that ships assigned to the private sector for overhaul will be overhauled in their home ports to the extent that sufficient competitive industrial capability and capacity allow. This policy minimizes the hardship of family separation, particularly after our sailors have spent many arduous months at sea in support of national commitments.

Navy workload planning documents will be provided annually to private industry to guide them in developing their business plans. This increased planning effort by the Navy and private contractors should lead to improved private-sector overhaul performance.

In the eight public shipyards the fiscal year 1983 program is executable within the current personnel authorizations requests in the President's budget.

In the private sector the fiscal year 1983 program is executable with the current personnel authorizations requested for supship—supervisor of shipbuilding—personnel in the President's budget.

MAINTENANCE CARRYOVER AND BACKLOG

Very briefly, I will address maintenance carryover or backlog.

A ship is generally designated as an overhaul backlog ship when its overhaul is delayed from the fiscal year in which the established overhaul cycle dictates. Although we suffered a high backlog in fiscal year 1976 amounting to 68 ships as a result of strenuous Vietnam operations, we have decreased the backlog to 16 in fiscal year 1982 and project a further reduction to 11 in fiscal year 1983. We are targeting zero backlog in fiscal year 1987.

The current level of backlog is not caused by a lack of funding; it is a result of operational constraints. We have too few ships to carry out national commitments and those we have are stretched thin. The net result is that some ships must be delayed in entering overhaul and, although we are projecting a zero backlog by fiscal year 1987, I anticipate that there will be, in fact, a small operational backlog in fiscal year 1987 and beyond.

Since the current overhaul backlog is dependent upon fleet operations rather than funding or shipyard capacity, additional assistance from private industry cannot reduce the existing backlog. A small number of ships in the overhaul backlog due to operational constraints is manageable and is not considered to be a maintenance problem.

Concerning dollar carryover in the ship maintenance and modernization program, we have in the past, as authorized, made obligation adjustments within the O. & M.N. account for increases within the scope of the original work order account. This has been done in relatively few cases where the scope of work originally authorized expanded significantly once the ship's equipment was actually opened for repair.

However, the new general provision in the fiscal year 1982 conference report of the appropriations committees has modified the congressional intent, in that commencing in fiscal year 1983 payment of unusual cost overruns incident to ship overhaul, maintenance and repair, can be charged to the expired O. & M.N. account, providing that the Secretary of Defense shall notify the Congress prior to such obligation. We will, of course, abide by the new procedures of the general provision.

While one of the subjects of today's hearing is to examine the ongoing depot-level maintenance initiatives, it should be realized that such initiatives not only apply to Navy maintenance efforts but also to its companion program of fleet modernization.

FLEET MODERNIZATION PROGRAM

The fleet modernization program—F.M.P. as it is called—is the Navy's program to improve mission capabilities of existing ships to counter both current and projected enemy threats.

The fleet maintenance program has been successful in meeting its objectives of upgrading the fleet's military capabilities and overall readiness. A measure of this success is the fact that approximately 2,500 alterations are being installed annually and that the number of alterations accomplished closely approximates the number originally programed.

In order to insure the continued effective execution of the ship maintenance and modernization program it is necessary that the shipyard plants and facilities be modernized to today's standards. This is accomplished through the shipyard modernization program. This program begun in the early 1970's, is a capital investment program designed to replace or improve old and obsolescent facilities and equipment.

The initial concept was to fund the program to a level that would provide a complete modernized shipyard complex by fiscal year 1979. Reduced funding, coupled with inflation, made it impossible to meet this goal and the current projection is that the program will not be complete until early in the 1990's.

We fully support the concept that shipyards be managed as a business. In fact, that is the Navy's objective.

Beginning in 1983 we will pass on to the customer the cost of acquiring new industrial plant equipment through the naval industrial fund, rather than by use of appropriated funds as in the past.

The budget targets for industrial plant equipment acquisition in fiscal year 1984 and the following years are approximately 5 percent of the estimated gross annual shipyard revenues, although the fiscal year 1983 outlays will fall substantially below this target.

The 5 percent annual equipment investment figure is a generally recognized and accepted criterion in private industry.

The funding of military construction at naval shipyards through a separate appropriation should be continued, since such expenditures are significant in nature and should, appropriately, be identified and authorized by the Congress in a separate appropriation.

In summary, I have attempted to describe to you in brief fashion a large and complex program. Its success is vital to the fleet's readiness. Adequate readiness, in turn, can insure successful accomplishment of our mission.

The Congress has been instrumental in the strides made during the past few years to improve our readiness posture.

We need the continued support of Congress, particularly with respect to *(a)* ship maintenance and modernization funding; *(b)* authorization for sufficient employees in the naval shipyards and the staffs of the supervisors of shipbuilding; and *(c)* naval shipyard modernization.

Mr. Chairman, this concludes my summary statement. I will respond to your questions at this time.

[The prepared statement of Admiral Nunneley follows:]

Prepared Statement of Rear Adm. James K. Nunneley, U.S. Navy, Director, Ships Maintenance and Modernization Division, Office of the Chief of Naval Operations

Good morning, Mr. Chairman. I am Rear Admiral James K. Nunneley. I serve on the staff of the Chief of Naval Operations as director of the ships maintenance and modernization policy, including the development of plans and programs for the accomplishment of repairs and modernization of U.S. Navy ships.

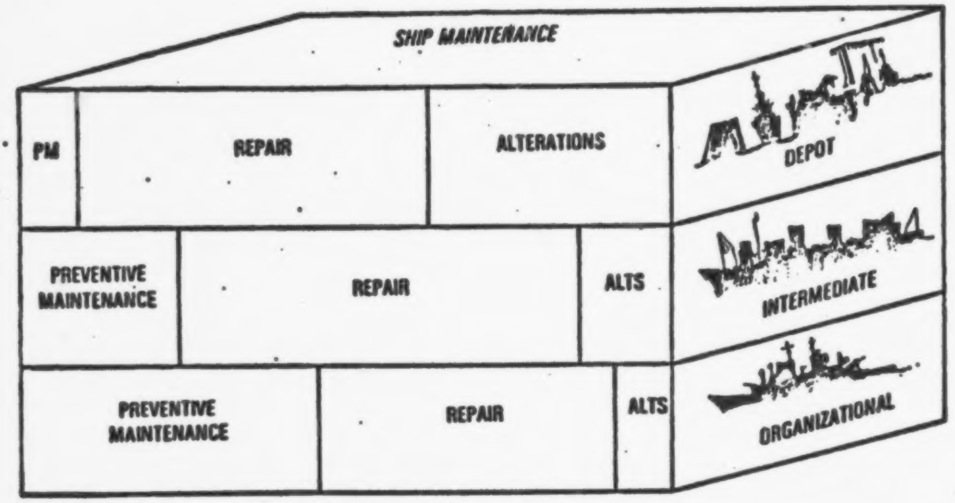
While the subject of today's hearings is entitled "Ship Overhauls and Modernization", it is important to note that ship overhauls are but one element of the Navy's ship maintenance and modernization program. To properly address the ship maintenance and modernization program, one needs to understand the ship maintenance strategy of the Navy which includes three levels of maintenance: Namely, organizational level, intermediate level and depot level. I will discuss each of these in this presentation.

The Navy's ship maintenance and modernization program has two basic objectives: First, to maintain an adequate material condition in the fleet and thus provide the maximum number of ships available for operations at sea; second, to modernize existing ships in order to enhance their capability so that they can counter current and projected enemy threats. Ships are also modified for reasons of safety, environment, reliability, and maintainability.

The Navy's policy is to maintain the fleet fully capable of meeting the expected threat and our ships must be in a material condition sufficient to allow them to accomplish their assigned mission. Further, our policy dictates that the required maintenance and modernization work should be performed at the lowest effective level of maintnance throughout the life cycle of the ships.

The program which implements this policy is characterized as a balanced approach to maintenance and modernization. It requires a contribution from each of the three levels of maintenance within the Navy. The lowest level is the organizational level consisting of the ship itself and the sailors on board the ship. At this level it is well to remember that on board ship, unlike most other organizations, sailors not only operate the equipment but also are charged with some responsibility for maintenance. This is necessary to ensure that emergent repairs can be made by our sailors when ships are operating far from shore support facilities. The shortage of experienced uniformed personnel in the fleet (currently determined to be 20,000 petty officers in fiscal year 1982) is adversely affecting organizational maintenance and forcing some of it to be transferred to a higher level. The next level is the intermediate maintenance level consisting of our tenders, repair ships and shore intermediate maintenance activities wherein sailors with specialized skills assist shipboard personnel by accomplishing intermediate level repair work, which is essentially work beyond the capability of the ship's personnel. The intermediate maintenance activities may also absorb organizational level work which is beyond the current capacity of the ship, due to such things as a high tempo of operations or a shortage of shipboard personnel.

The highest level of maintenance is the depot level consisting of Navy and commercial shipyards performing conversion, alteration and repair work on Navy ships. In general, the workload is assigned to these specific levels on the basis of the capabilities at each level and the extent of work required. By a balanced program we mean that throughout the operating cycle of a ship, maintenance tasks are divided among the three levels in order to achieve the highest possible operational availability for the resource investment made.

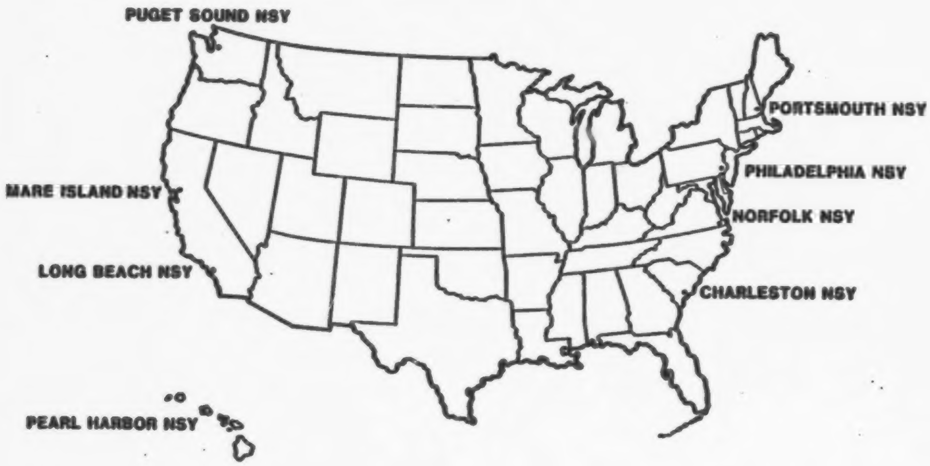

SHIP MAINTENANCE
PM
REPAIR
ALTERATIONS
DEPOT
PREVENTIVE MAINTENANCE
REPAIR
ALTS
INTERMEDIATE
PREVENTIVE MAINTENANCE
REPAIR
ALTS
ORGANIZATIONAL

The relative proportion of preventive maintenance, repairs and alterations allotted to the three levels of maintenance is shown here. As said before, our basic policy is to accomplish ship maintenance at the lowest level where the capability exists. Getting more ships returned to a maintainable baseline condition during the overhaul period is necessary, but is not sufficient. We are dedicated to getting larger contributions and greater output from a balanced maintenance program that will achieve optimum return from all three levels of maintenance.

In accordance with the tasking for this hearing, I will address the depot level in some detail and, as you requested, further emphasize current and projected workloads, manpower requirements, pricing and carryover policies, and industrial base modernization.

The depot maintenance and modernization program is clearly our largest program because it is at this level that the most extensive work is accomplished, including the accomplishment of major alterations to the ships.

PUBLIC SHIPYARDS


PUGET SOUND NSY
PORTSMOUTH NSY
PHILADELPHIA NSY
MARE ISLAND NSY
NORFOLK NSY
LONG BEACH NSY
CHARLESTON NSY
PEARL HARBOR NSY

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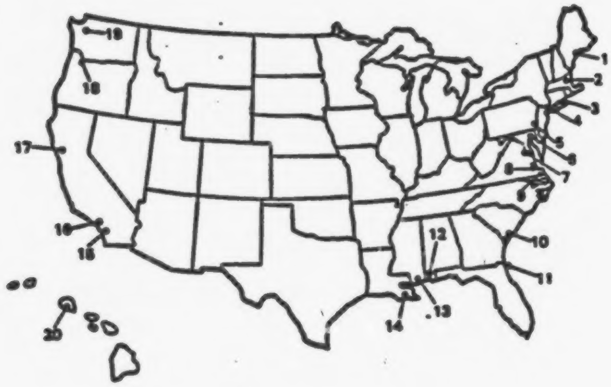
SHIP REPAIR INDUSTRY IN THE UNITED STATES



1. *BATH IRON WORKS

2. *BETHLEHEM STEEL - BOSTON
*MUNRO DRYDOCK
*GENERAL SHIP AND ENGINE WORKS - BOSTON
*NEWPORT SHIPBUILDING - NEWPORT, RI
*SOUTH PORTLAND

3. GENERAL DYNAMICS - ELECTRIC BOAT

4. *BETHLEHEM STEEL - HOBOKEN
*COASTAL DRYDOCK
TODD - BROOKLYN
*JACKSON ENGINEERING
*PERTH-AMBOY DRYDOCKS

5. *PENN SHIP (formerly SUN SHIPBUILDING AND DRY DOCKS)

6. BETHLEHEM STEEL - SPARROWS POINT

7. *MARYLAND SHIPBUILDING AND DRY DOCKS
*BETHLEHEM STEEL - KEY HIGHWAY

8. *NEWPORT NEWS SHIPBUILDING AND DRY DOCKS
*HORNE BROTHERS

*CONDUCTED AN OVERHAUL IN THE PAST TWO YEARS.

9. *NORFOLK SHIPBUILDING AND DRY DOCKS
*METRO MACHINE
JONATHAN CORPORATION

10. *DETYENS MARINE
SANDBLASTERS, INC.
BRASWELL MT. PLEASANT
*METAL TRADES

11. JACKSONVILLE SHIP
*ATLANTIC DRY DOCKS
TAMPA SHIPBUILDING AND DRY DOCKS
*BELLINGER SHIP

12. *ALABAMA SHIPBUILDING AND DRY DOCKS

13. *INGALLS/LITTON

14. *AVONDALE SHIPYARDS
BOLAND MARINE

15. *WASSCO
*TRIPLE A - SOUTH
ARCHELL CORP.
ATKINSON MARINE
*SOUTHWEST MARINE

16. *TODD - LOS ANGELES
*AL LARSON
WILMINGTON MARINE

17. *BETHLEHEM STEEL - SAN FRANCISCO
*TRIPLE A
SAN FRANCISCO WELDING
SOUTHWEST MARINE
*SERVICE ENGINEERING
*TODD - ALAMEDA
*MERRITT

18. *NORTHWEST MARINE
DILLINGHAM

19. *LOCKHEED SHIPBUILDING
*TODD - SEATTLE
*LAKE UNION DRY DOCKS
TACOMA BOAT
MARINE POWER & EQUIPMENT
*SEATAC

20. *DILLINGHAM
*PACIFIC MARINE

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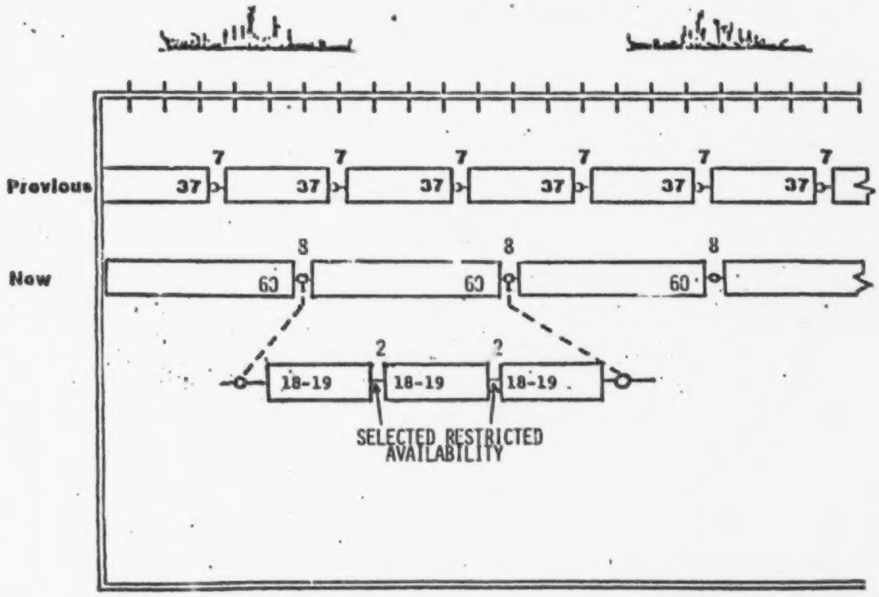
The locations of the sites at which our depot maintenance is accomplished are delineated in chart 6 and chart 7. Chart 6 displays the location of the eight naval (public) shipyards. Chart 7 delineates the geographic distribution of the principal commercial yards (about 60) with whom the Navy does business.

Depot level maintenance can be grouped into two basic categories; planned maintenance and unplanned maintenance. Planned maintenance is scheduled well in advance and takes into account the ships operating schedule. Unplanned maintenance is assigned when a ship requires repairs for an unforeseen breakdown.

Planned maintenance can be subdivided into two categories; regular overhauls (ROH's) and selected restricted availabilities (SRA's). A regular overhaul, as the words imply, is a period assigned to accomplish general repairs to a ship's systems and equipments at a naval shipyard or a private shipyard. Regular overhauls are scheduled for planned durations at specific intervals during a ship's lifetime.

Unplanned maintenance consists of restricted availabilities (RAV's) and technical availabilities (TAV's). Restricted availabilities are assigned for specific repairs which require the ship to be present in the repair activity. Hence, the ship is rendered incapable of fully performing its assigned mission. Technical availabilities are assigned for specific repairs when the presence of the ship is not required. In this case, a piece of equipment may be removed from the ship for repair in the shipyard. However, the ship is capable of continuing to perform its assigned mission.

Destroyer Engineered Operating Cycle



It is essential that the operational availability of the Navy's limited ship assets be maximized. This next chart illustrates one of the techniques we are using to accomplish this: The use of an engineered operating cycle. Under a conventional cycle a ship would operate for a period of time after an overhaul, shown here as 37 months, before entering a shiyard for the next overhaul. In an engineered cycle the period between overhauls is extended, to 60 months for a typical destroyer as shown here. To insure adequate material condition is maintained over the longer period, selected restricted availabilities of about two months duration are scheduled for planned, non-deployed periods. These new, longer cycles are increasing the time over which the ships can be operated without interruption for extended overhaul periods.

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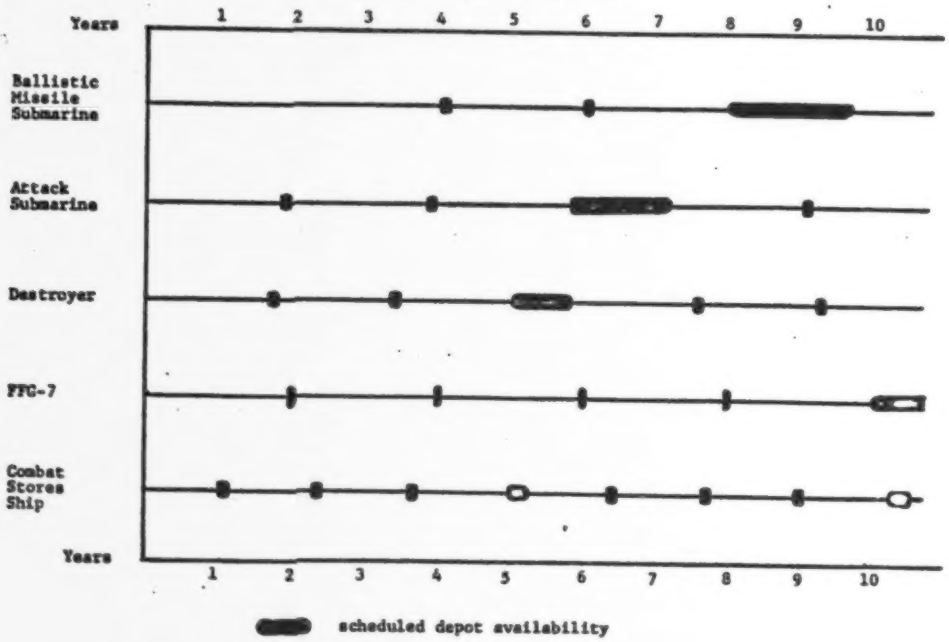
SAMPLE
ENGINEERED OPERATING CYCLES



The parameters of engineered operating cycles can vary significantly depending on the ship type involved and its normal operational scenario. The first ships to enter an EOC were the ballistic missile submarines in the early 1970's. The programs for these ships resulted in an operational cycle of 6 to 9 years with planned availabilities of a nominal 60-day duration every 24 months until the next overhaul. For some of these ships the interval between overhauls has been extended recently to 12 years.

The next ships to enter an EOC program were attack submarines. Their program extended the interval between overhauls from 43 to 70 months for those ships included. Within this 70-month operating cycle, these ships are scheduled for a 60-day depot availability every 22 months. Presently plans are underway to place certain attack submarines in a program similar to that designed for the ballistic missile submarines. These ships will have their operating cycle further extended to 84 months.

The FFG 7 class ships presently entering the fleet have been designed for reduced crews and limited ship's force maintenance capacity. As a result, these ships will undergo a progressive overhaul during a series of short depot level availabilities at two-year intervals which emphasize equipment changeout vice conventional repair-in-place methods. Under this concept the ship and its equipment will be undergoing continuous overhaul at any given point in the ship's maintenance schedule. Major modernization periods are scheduled for this ship class at approximately 10-year intervals.

Another variant of the EOC concept is the phased maintenance program currently being applied to the Atlantic Fleet combat stores ships operating out of Norfolk. There are only three of these ships in the Atlantic Fleet and there is a requirement to maintain one ship on station in the Mediterranean at all times. When one of the ships is in overhaul the two remaining ships would be required to make back-to-back deployments. To alleviate this problem, and also in response to a House Appropriations Committee direction to conduct a test of merchant marine ship maintenance practices, these ships have been placed in a program which features a 5-year operating cycle with a 4-month reduced scope overhaul at the end of that period. Three, 2 to 3 month depot availabilities are also scheduled during the normal at-home periods. This program also utilizes the port engineer concept of management by civilian port engineers assigned to the operational commander's staff. The pro-

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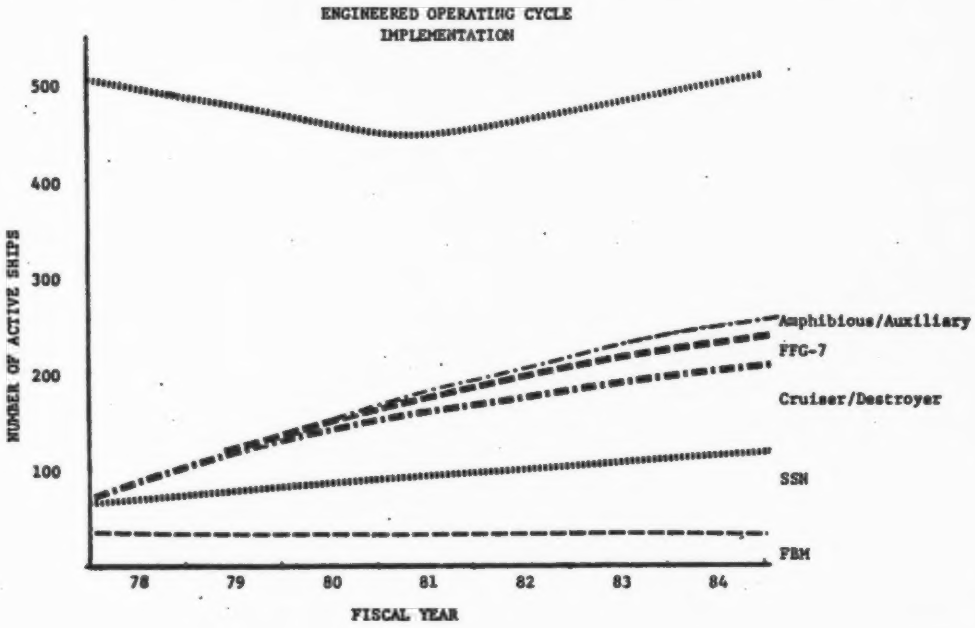
gram has been underway for about 2½ years now and its first formal evaluation is being conducted at the present time. Because of the potential payoff of this program in assisting the operational commander to more efficiently integrate operational and maintenance scheduling, and due to the increased commitments in the Indian Ocean, we are now extending portions of the concept to the four Pacific Fleet combat stores ships. Plans are also underway to implement the program on the seven replenishment oilers (AOR's) beginning in fiscal year 1984.



We are expanding EOC concepts to other existing ship classes, most notably the amphibious and auxiliary ship types. For new ships, such as the CG 47 class, the engineering necessary to support an EOC program is being accomplished during construction. We have made significant progress in developing and introducing EOC programs. By the end of fiscal year 1984, about one-half of the fleet, will have entered engineered operating cycle programs.

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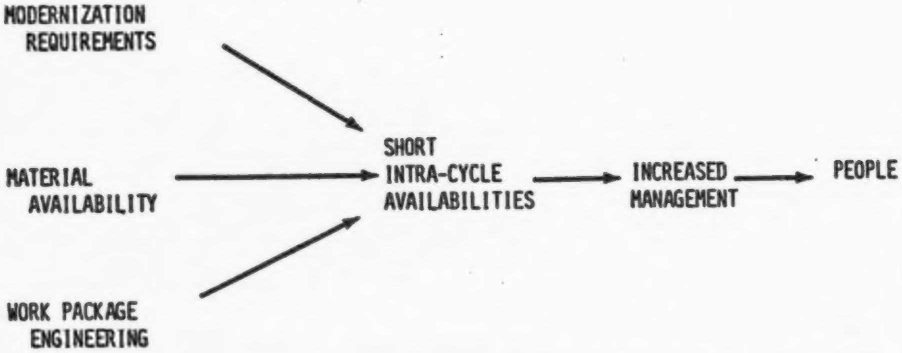
ENGINEERED OPERATING CYCLE PROBLEM AREAS



Although EOC programs are successful in helping the operational commander obtain maximum availability from his ships, they are not without drawbacks.

Some modernization requirements cannot wait for five to ten years, which is the extended period between major overhauls for EOC ships. Rather, ship alterations must be installed during the short, intra-cycle depot maintenance periods. This may mean installing them incrementally during several availabilities, doing extensive prefabrication, packaging the material and software in such a way as to minimize installation time, or combinations of all these approaches.

For a short availability to be successful, effective material planning and management procedures must be used. All material must be there when the availability starts. Additionally, more contingency material must be available to offset long material lead times for some components.

Engineering must be completed to ensure that the work packages developed for the short intra-cycle availabilities include and plan for accomplishment of items which could affect the ability of the ship to successfully operate through the longer operational cycle. Drawings and work instructions must be completed when the availability starts. Special procedures for expediting decisions must be used.

In general, the increased number of short, labor intensive availabilities which must be planned and executed require increased management attention to ensure their success. This is in turn exacerbating an already difficult manning situation in the naval shipyards and in the offices of the supervisors of shipbuilding, conversion and repair who administer Navy work at private shipyards. Next, I will discuss briefly the fiscal side of ship maintenance and modernization, and further be responsive to the committee's request that I address the Navy's pricing policy on ship overhauls.

The process of determining our funding requirements begins far in advance of the budget submission and, of course, well in advance of inducting individual ships into the overhaul schedule in the year of execution.

The central point of focus for determining ship overhaul requirements is at the type commander level. Each type commander is staffed with personnel who are assigned responsibility for the material management of ship types, for example, frigates, carriers and submarines, throughout the operating cycle; these personnel maintain familiarity with specific problem areas on individual ships under their cognizance. They also stay in close communication with the ship's commanding officer and crew who maintain an automated data base of material discrepancies on systems and equipments to be corrected at each of the three levels of maintenance.

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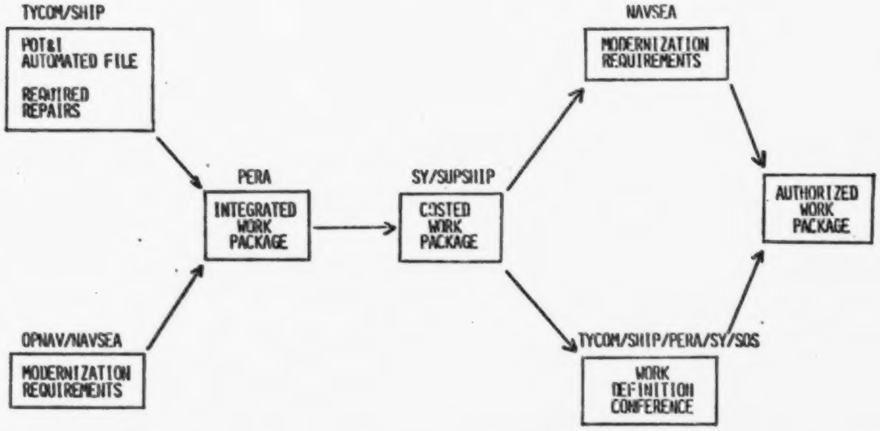
OVERHAUL WORK PACKAGE
DEFINITION/AUTHORIZATION



For a scheduled overhaul, it is the responsibility of the type commander and the ship's force to develop the repair package. This is accomplished by selecting items requiring accomplishment from the automated file and by identifying additional work through the use of series of pre-overhaul tests and inspections, known as a POT&I. Accomplishment of the POT&I is coordinated for the type commander by planning activities known as planning and engineering for repairs and alterations (PERA's). Total fleet coverage is provided by five PERA's each specializing in a ship type.

Similarly, the modernization package is developed through the coordinated efforts of the type commander staff, the Commander, Naval Sea Systems Command and the Chief of Naval Operations well before the commencement of the overhaul.

Following completion of the pre-overhaul tests, and identification of the modernization package, the PERA assembles and integrates all requirements in a preliminary work package. This coordinated package is provided to the accomplishing naval shipyard or supervisor of shipbuilding who estimates the costs involved in accomplishing the specified work. For modernization items these estimates are provided to the naval sea systems command for authorization and funding. The proposed repair package then becomes the subject of a work definition conference conducted with the type commander, ship, PERA and accomplishing activity in attendance. The results of this conference then form the authorized repair package and the estimated price to accomplish the defined work.

Ship maintenance and modernization funds are provided via the Navy Comptroller to CNO who in turn provides such funds to the fleet commands and to the Chief of Naval Material for Ship Maintenance and Modernization respectively. The fleet command will, for maintenance, and naval sea systems command will for modernization, fund the planning estimate directly to the industrial activity.

Upon completion of each overhaul, the shipyard prepares a depature report which provides a breakdown of direct labor man-days and costs required for each job order. The departure report provides detailed overhaul data such as man-days, material and associated costs for specific job orders. These data, in turn, are used as the basis for development of future budget requirements.

Work on the 1983 President's budget, began in November 1980. It is a difficult task to predict requirements by individual ship so far in advance. It should be noted that the requirement is reviewed at three levels prior to submission to the Congress; namely Navy program and comptroller offices, OSD program and comptroller offices, and the Office of Management and Budget.

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FY 1983 CONGRESSIONAL BUDGET
CONTROL TOTALS
(DOLLARS IN MILLIONS)

	FY 1980	FY 1981	FY 1982	FY 1983
SCHEDULED OVERHAULS	$ 1,656.4	$ 1,930.7	$ 2,168.2	$ 2,518.8
NUMBER OF OVERHAULS	58	67	63	66
RESTRICTED AVAILABILITIES	560.4	752.2	762.1	926.7
NUMBER OF SELECTED RESTRICTED AVAILABILILTIES	44	71	74	77
SHIP ALTERATIONS	763.0	949.3	965.7	1,035.3
INTERMEDIATE MAINTENANCE	168.8	217.8	260.4	284.3
TECHNICAL SUPPORT	95.8	107.5	119.3	125.2
ORGANIZATIONAL MAINTENANCE	188.4	362.0	457.7	570.0
FLEET OUTFITTING	-	-	170.6	217.5
TOTAL	$ 3,432.8	$ 4,319.5	$ 4,904.0	$ 5,677.8

This chart provides an overview of the cost of the Navy's ship maintenance and modernization program. The data represents fiscal year 1983 congressional budget submit control totals. The program for fiscal year 1983 shows 66 overhauls including 2 aircraft carriers, 3 fleet ballistic submarines, 9 nuclear attack submarines, 34 surface combatants and 1 diesel submarine.

The total number of overhauls remains relatively constant: 67 in fiscal year 1981, 63 in fiscal year 1982 and 66 in fiscal year 1983. The dollar value of the program is more a function of the ship mix than the absolute number of overhauls. Further, other factors are changing the distribution of funding required. Overhaul durations are being shortened on some ships with a concurrent reduction in repair as well as alteration packages. Additional ships have been approved for placement on phased maintenance and extended operating cycles. The net result is a reduction of overhaul requirements, but a corresponding increase in the selected restricted availabilities requirements.

The chief of Naval operations has established planning factors for overhaul durations and intervals for each class of ship in the Navy. These planning factors are key elements in building long-range schedules for overhauls and selected restricted availabilities that dovetail with the fleet operating schedules and project the workload for the industrial activities. They are based upon technical information, engineering judgment, operating experience and modernization requirements for each class. Planning factors are regularly analyzed and restudied from operational, material and design standpoints to determine when changes are required.

The subject of ship overhaul scheduling is a significant planning factor in the program. In early fall, each year, key Navy participants meet to schedule overhauls and selected restricted availabilities. Participants include personnel from my staff, the naval sea systems command headquarters, the fleet commanders and the type commanders, naval shipyards and the supervisors of shipbuilding. Using the planning factors and the ship's long-range operating schedule, a 5-year overhaul program is constructed. Major emphasis is placed on the year for which the budget is being developed. It is important to note that the maintenance requirements are presented by the ship type commanders, the organization most intimately aware of the individual ship requirements.

Subsequent to the formulation of the overhaul schedule, the Commander, Naval Sea Systems Command, with inputs from the fleets and approval of CNO, determines the distribution of the workload to both public and private yards. There are four significant criteria used in determining distribution of the workload: Three are operational considerations, yard qualifications, and homeporting requirements which specify that maximum regard be given to overhauling ships at or near their

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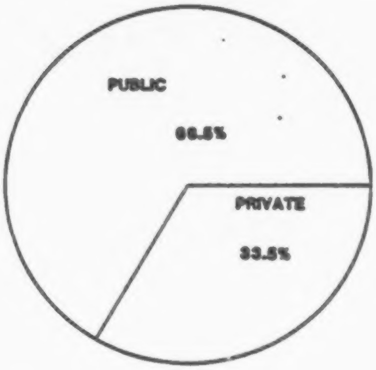
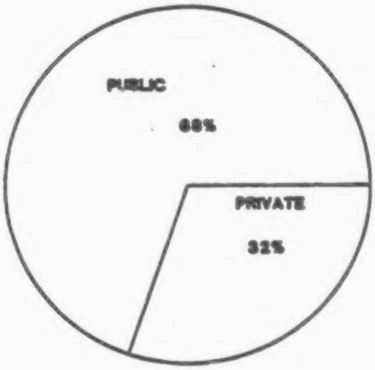
home ports in order to minimize perturbations on the crews with resultant adverse effect on retention.

The fourth consideration in the distribution of workload is to insure that adequate public and private ship maintenance capability and capacity to support Navy requirements in the long-term is provided. In accordance with existing policy, no more than 70 percent of ship maintenance funds are assigned to the public sector and at least 30 percent to the private sector. The Appropriation Act normally includes a dollar ceiling on maintenance and modernization funds expended in naval shipyards.

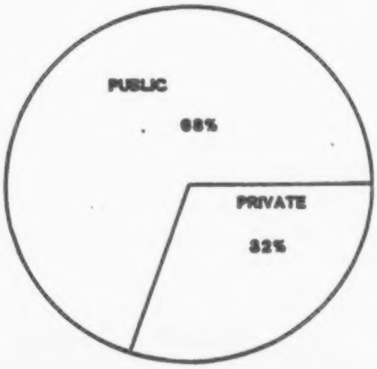
Repairs and Ship Alterations Distribution Between Public and Private Shipyards



FY 1980



FY 1981



FY 1982 (Estimated)

NOTE: All figures are percentages of total current dollar value of repairs a alterations.

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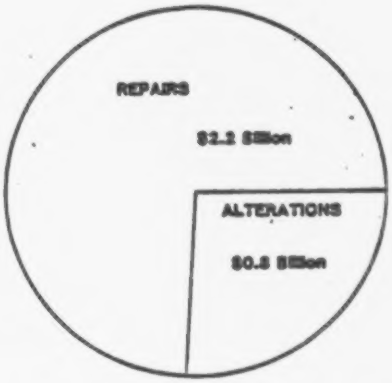
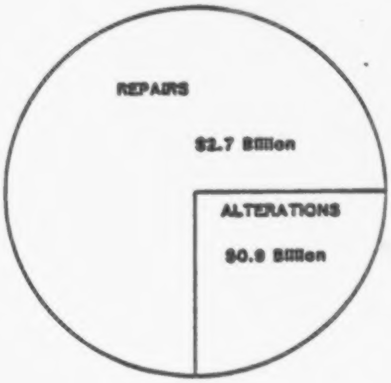
This chart displays the distribution of ship repairs and alterations between the public and private shipyards during the last 2 fiscal years, and the projections for fiscal year 1982.

Repairs and Ship Alterations Accomplished During Ship Overhauls and Restricted Availabilities



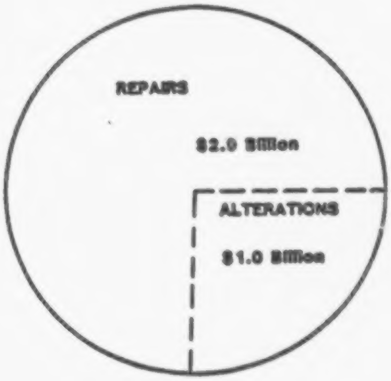
FY 1980

Total: $3.0 Billion



FY 1981

Total: $3.6 Billion



FY 1982 (Estimated)

Total: $3.9 Billion

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This chart shows the funding distribution between repairs and alterations both public and private.

With respect to the workload in the private shipbuilding and ship repair industry it is noted that the number of employees, as recorded by the Bureau of Labor and Statistics, increased from 166,000 in 1979 to 172,000 in 1980, and again to 176,400 at the end of November 1981.

PUBLIC / PRIVATE ROH SCHEDULING

SURFACE SHIPS	PUBLIC	PRIVATE
CV / CVN / CG / CGN / DDG / FFG / PHM	●	
FF 1052 / FF 1040 / DD 931 / DD 945 / DD 963	●	●
LHA / LCC	●	
LPH	●	●
OTHER AMPHIBIOUS, AUXILIARY & SUPPORT SHIPS		●
SUBMARINES AND SUBMARINE TENDERS		
SSN / SSBN	●	●
AS (FBM)	●	
AS (SSN)	●	●
MINOR SUPPORT SHIPS		●

Although we have traditionally assigned our more complex warships to naval shipyards (this chart shows distribution) the proportion of complex warships in the fleet has been increasing since the mid-seventies, and it is clear therefore that more complex ships will go to private shipyards for overhaul. The Navy recognizes that positive action will be required for shipyards to develop the necessary experience, skills, and facilities to perform complex ship overhauls on a routine basis.

We also recognize that the supship organization, which is responsible for the administration of shipwork contracts assigned to private yards, must be strengthened, both in numbers and quality. There is expected to be a heavier involvement of the supship organization in the determination of repair work, preparations of specifications and contract administration of complex overhauls which will place a heavier demand on supervisor personnel.

In April 1981, we conducted our first annual private sector overhaul planning conference to develop a comprehensive plan for future private overhauls. The plan has been given to private industry to help them in long-term planning. It takes into account that ships assigned to the private sector for overhaul will be overhauled in their home ports to the extent that sufficient competitive industrial capability and capacity allow. This policy minimizes the hardship of family separation, particularly after our sailors have spent many arduous months at sea in support of national commitments.

Navy workload planning documents will be provided annually to private industry to guide them in developing their business plans. This increased planning effort by the Navy and private contractors should lead to improved private sector overhaul performance. I will, later in this statement, address more specifically the depot operations improvement program.

In the eight public shipyards, the fiscal year 1983 program is executable within the current personnel authorizations requested in the President's budget.

In the private sector the fiscal year 1983 program is executable with the currently assigned numbers of supship (supervisor of shipbuilding) personnel. To support the larger private sector workload for fiscal year 1984, supship employment should increase by about 10 percent, some 400 people, to properly contract for and manage the private sector repair and new construction workload. Ship overhaul contracts to private shipyards will consist primarily of work on surface combatant ships that cannot be accommodated by public shipyards and work on amphibious warfare, logistic support ships, and service craft.

Very briefly I will address maintenance carry over or backlog. A ship is generally designated as an overhaul backlog ship when its overhaul is delayed from the fiscal year in which the established overhaul cycle dictates. Although we suffered a high backlog in fiscal year 1976, amounting to 68 ships, as a result of strenuous Vietnam operations, we have decreased the backlog to 16 in fiscal year 1982, and project a further reduction to 11 in fiscal year 1983. We are targeting zero backlog in fiscal year 1987. The current level of backlog is not caused by a lack of funding. It is a result of operational constraints. We have too few ships to carry out national commitments and those we have are stretched thin. The net result is that some ships must be delayed in entering overhaul and, although we are projecting a zero backlog by fiscal year 1987, I anticipate that there will, in fact, be a small operational backlog in fiscal year 1987 and out years. Since the current overhaul backlog is dependent upon fleet operations rather than funding or shipyard capacity, additional assistance from the private industry cannot reduce the existing backlog. A small number of ships in the overhaul backlog due to operational constraints is manageable, and is not considered to be a maintenance problem.

Concerning dollar carry over in the ship maintenance and modernization program we have, in the past as authorized, made work scope obligation adjustments within the O&M,N account. This has been done in relatively few cases where the scope of work originally authorized expanded significantly once the ship's equipment was actually opened for repair. However the new general provision in the fiscal year 1982 conference report of the appropriation committees has modified the congressional intent in that payment of unusual cost overruns, incident to ship overhaul, maintenance and repair, can be charged to the expired O&M,N account providing that the Secretary of Defense shall notify the Congress prior to such obligation. We will, of course, abide by the new procedures of the general provision.

While one of the subjects of today's hearings is to examine ongoing depot level maintenance, it should be realized that such initiatives not only apply to Navy maintenance efforts but also to its companion program of fleet modernization.

The fleet modernization program, FMP as it is called, is the Navy's program to improve mission capabilities of existing ships to counter both current and projected enemy treats. The modernization program also installs alterations related to safety, reliability and maintainability plus pollution abatement.

The FMP has been highly successful in meeting its objectives of upgrading the fleet's military capabilities and overall readiness. A measure of this success is the fact that approximately 2,500 alterations are being installed annually and that the number of alterations accomplished closely approximates the number originally programmed. This is not to say that alternations are not being deferred for such reasons as schedule changes or material problems, but generally speaking we are carrying out the FMP as planned.

An example of ongoing modernization efforts in fiscal year 1982 is the major upgrade of combat systems in cruiser and destroyer class ships. This upgrade includes installation of new detection radars, modifications to tactical data systems and greatly improved engagement capabilities with installation of Tomahawk, Harpoon and advanced standard missiles. Similar type mission upgrades plus readiness improvements are being accomplished aboard other type fleet units.

In order to improve effectiveness, this complex program is constantly being monitored to identify weaknesses and initiate corrective actions. Current improvement efforts are focused on reducing the number of alterations which must be deferred and improving material management. Actions being taken include:

Initiation of fleet verification conferences to review status of ship alteration packages 13-15 months prior to start of overhauls.

Improving tracking programs to insure integration of procurement and installation processes.

Improving timeliness and quality of technical guidance provided to installing activities.

Improving alteration cost estimates by insuring that return cost information is available.

Improving alteration material management by emphasizing proper ordering procedures and providing greater visibility and use of shipyard material to supply system managers.

In summary, despite inherent program constraints such as escalating costs, extended periods between overhauls, schedule changes, and budget perturbations, the flexibility and effectiveness of the FMP is aptly demonstrated by its ability to respond rapidly to changing requirements and, the fact that we are able to upgrade our ships to meet the changing threat of our potential adversaries.

In order to insure the continued effective execution of the ship maintenance and modernization program, it is necessary that the shipyard plants and facilities be modernized to today's standards. This is accomplished through the shipyard modernization program. This program began in the early 1970's and is a capital investment program designed to replace or improve old and obsolescent facilities and equipment to:

A. Correct urgent deficiencies in the naval shipyard's capability to support U.S. Navy ships.

B. Provide the naval shipyards with new capabilities to support new ship classes.

C. Improve naval shipyard efficiency and productivity.

D. Enhance naval shipyard capability to meet mobilization requirements.

The initial concept was to fund the program to a level that would provide a complete modernized shipyard complex by fiscal year 1979. Reduced funding coupled with inflation made it impossible to meet this goal and the current projection is that the program will not be complete until early in the 1990's.

We fully support the concept that shipyards be managed as a business. In fact, that is the Navy's objective. Beginning in fiscal year 1983 we will pass on to the customer the cost of acquiring new industrial plant equipment through the naval industrial fund rather than by use of appropriated funds, as in the past. (Heretofore, the program has been funded from three appropriations: Milcon for facilities; OPN for plant equipments; and O&M,N for expense items and equipment installation and relocation). The budget targets for industrial plant equipment acquisition in fiscal year 1984 and the following years are approximately 5-percent of estimated gross annual shipyard revenues, although the fiscal year 1983 budget will fall substantially below this target. The 5-percent annual equipment investment figure is a generaly recognized and accepted criterion in private industry. This level of investment will insure plant modernization and enable the Navy to benefit from new manufacturing technologies and processes. The funding of military construction at naval shipyards through a separate appropriation should be continued since such expenditures are significant in nature and should, appropriately, be identified and authorized by the Congress in a separate appropriation.

In summary, I have attempted to describe to you in brief fashion a large and complex program. Its success is vital to the fleet's readiness. Adequate readiness, in turn, can insure successful accomplishment of our mission. The Congress has been instrumental in the strides made during the past few years to improve ship maintenance and modernization. We need the continued support of Congress particularly with respect to:

A. Ship maintenance and modernization funding;

B. Authorization for sufficient employees in the naval shipyards and the staffs of the supervisors of shipbuilding; and

C. Naval shipyard modernization.

Mr. Chairman, this concludes my prepared statement. I will respond to your questions at this time.

Senator HUMPHREY. Thank you, Admiral.

You mentioned the operational constraints posed by a shortage of noncommissioned officers. Where are we headed in 1983 in that regard in the maintenance area?

Admiral NUNNELEY. We are seeing improvement in our retention efforts, largely as a result of the pay initiatives of last October. It is, however, a long-range problem. The Navy is projecting it will be at least 5 years before we see the end of the problem.

As far as the impact on maintenance at the present time, we see early encouraging signs that we are able to retain some of the skilled personnel that we had been losing in the past.

In the current fiscal year I don't personally feel that we are going to see that much change, frankly, in terms of how it will affect our organizational and intermediate maintenance.

Senator **Humphrey**. What about the civilian manpower ceiling, how is that affecting you?

Admiral **Nunneley**. The Navy's position is that we would prefer to see the ceilings removed from the naval shipyards and operate them truly as industrially funded activities. The fiscal year 1983 present budget you have calls for an increase in the naval shipyard ceiling of about 4,000 in rough numbers, which we feel will permit us to execute the fiscal year 1983 programs.

Senator **Humphrey**. The principal constraint then to timely overhaul is the inability to schedule ships because they are needed; is that it?

Admiral **Nunneley**. I think that is only one of the factors involved. I did make the point in the statement that we are stretched thin. At the present time that is the driving factor that is preventing us from getting down to a zero backlog, yes, sir.

Senator **Humphrey**. Will you explain in more detail the EOC matter. How are you extending the overhaul period? Are you simply intensifying ongoing maintenance?

Admiral **Nunneley**. There are two parts involved, Mr. Chairman. One, is that we have extended the operational period between overhauls and we have injected during the operational cycle depot maintenance periods which we call selected restricted availabilities, of roughly 2 months or 3 months duration.

The theory here is that as the ship operates following an overhaul its readiness begins to decline and then we will have short maintenance periods where we can restore it to a higher level of material readiness and permit it then to slide down to the next one. What we have is a sawtooth material condition curve rather than a steady decline before it goes back into regular overhaul.

The concept is that we will strive to increase the operational availability of the ship and that we will not expend any more money on maintenance using the EOC approach.

Senator **Humphrey**. Have you been able to identify cost savings under this policy?

Admiral **Nunneley**. It is too early for us to say. We are entering into the first overhaul following the baseline overhauls for some of the FF-1052-class ships in the current year, so I would have to withhold any judgment on cost savings.

My opinion is that if there are cost savings, they are relatively small. Primarily the advantage is going to be an increase in operational availability of the ships.

Senator **Humphrey**. How confident are you that the overhaul program anticipated in the 1983 budget will be executed as planned? Historically, have you had a large fall-off?

Admiral **Nunneley**. No, sir. Well, it depends on how far back you go in history. In the last 3 or 4 years we have executed the number of overhauls in the budget or have come within one or two because of other factors that interfere.

For example, we had to defer the *Constellation* overhaul from 1981 to 1983 because of the situation on the *Enterprise.* I feel confident that we can execute the 1983 program as presented.

Senator HUMPHREY. Let us focus on a couple of the problems, the *Enterprise,* to begin with. It was late; it was overbudget. What happened and how are we going to avoid that?

Admiral NUNNELEY. I would treat the *Enterprise* as a one-of-a-kind situation, because the ship is unique in terms of complexity. It has eight reactors; its follow-on ships, of course, have two reactors. The *Nimitz* is coming up for overhaul in the 1983 program. The *Enterprise* commenced a 20-month overhaul which we felt at the time was extremely difficult and represented a high degree of risk, for several reasons: It was the largest complex overhaul ever undertaken by the Puget Sound Naval Shipyard. It was the first nuclear carrier to be overhauled at Puget Sound Naval Shipyard.

At the time we had a relatively high nuclear workload of submarines and cruisers at the shipyards, amounting to 16 reactors at one point in time during the *Enterprise* overhaul.

We went through a period of about four different extensions on that ship, for various reasons, beginning with the initial problems in setting the plant conditions. Part of the problem was a lack of test personnel at the shipyard at Puget Sound.

We don't expect these problems to exist on *Nimitz* in 1983 and on *Eisenhower* in 1985, because we can apply the lessons of *Enterprise* to those ships. Those ships were built by Newport News and, of course, *Nimitz* is scheduled to be overhauled by that yard. Newport News has a better supply of qualified nuclear test personnel, as opposed to the situation that we found at Puget.

For those and other factors we are not anticipating an extension like that experienced on *Enterprise.*

Senator HUMPHREY. I take it from what you have said that one of the problems was that they had a heavy workload. You mentioned a number of other ships being overhauled at the time—submarines and frigates, I think. Did I interpret that correctly?

Admiral NUNNELEY. Yes, sir; they had a heavy nuclear workload. At the time we knew that if the *Enterprise* overhaul was delayed for any reason we were going to experience a domino effect and see follow-on impact on some of the submarines and cruisers, and as *Enterprise* was extended rather considerably, we in fact did see that effect on the other ships.

Senator HUMPHREY. Is it your opinion now, in retrospect, that Puget overscheduled?

Admiral NUNNELEY. With 20/20 hindsight, yes, sir, because we worked a large number of man-days, a larger number than we had anticipated when we first started.

I was the shipyard commander at Puget at the time. I did not feel that we were overtaxed based on the work package that we put together. We had a lot of help from a lot of other experts, including Newport News who built the ship.

I think everybody going into the overhaul felt that although it was a high-risk overhaul, as I said, we felt we had a very good shot at it.

Senator **Humphrey**. What I am getting at is the collateral work, the frigates, for instance. They can be overhauled elsewhere, can't they?

Admiral **Nunneley**. We only have a few nuclear qualified shipyards in the country, six public yards and two private yards. The answer is yes, based on limitation of qualified nuclear personnel at the sites.

Senator **Humphrey**. Do we have nuclear frigates?

Admiral **Nunneley**. Yes, sir; there are two frigates in the 1983 program coming up. *Truxtun* and *South Carolina* are coming up in the 1983 program.

Senator **Humphrey**. How was the cost overrun on the *Enterprise* financed; where did that money come from?

Admiral **Nunneley**. I would like to provide that for the record, just to be completely accurate about it. That was a 1979 overhaul. The bulk of that work was within scope work.

The general answer to your question is that the moneys came from other portions of the O. & M. Navy account. I can provide for the record an accurate breakdown.

[The information follows:]

USS ENTERPRISE OVERHAUL

The overrun on USS *Enterprise* overhaul was funded by rephasing the overhaul program and realignment within the O. & M., N appropriation.

Approximately 70 percent of the growth was accommodated within the maintenance/modernization account, as follows:

a. Rephasing of select overhauls without disruption to the operational schedules included schedule substitution of the *Scamp* (SSN 588), *Sandlance* (SSN 660), and *Tunny* (SSN 682) in lieu of the *Dace* (SSN 607), *Swordfish* (SSN 579) and *Bates* (SSN 680). Differences in work packages for these submarines permitted internal realignment of funds for *Enterprise*.

b. The extension of *Enterprise* overhaul duration necessitated deferral of the *Constellation* overhaul for operational reasons. Since her overhaul was deferred to fiscal year 1984, the prior year advance funds were transferred to the *Enterprise* overrun.

c. Favorable bids on select private overhauls resulted in lower execution of these contracts and funds were realigned.

Approximately 30 percent of the growth was funded from other sources within the O. & M., N appropriation.

Senator **Humphrey**. Let us turn to the *Guam*. What was the problem there?

Admiral **Nunneley**. Let me correct something that I may have misled you on a while ago. I mentioned we do have nuclear frigates. We have designated these ships as nuclear cruisers, and the record should show that.

Senator **Humphrey**. What was the problem with the *Guam*?

Admiral **Nunneley**. The *Guam* overhaul was completed late in 1980. At the time it received considerable publicity because the ship left Philadelphia Naval Shipyard and returned to Norfolk and had some initial problems.

We had accelerated *Guam*'s overhaul by 5 months, long before the overhaul started, and had restricted the time to 35 weeks duration. The shipyard had asked for a 3-week extension of the overhaul, which was denied because we had an operational commitment for *Guam*.

In retrospect, I think the Navy's position is that we would have been prudent to extend the overhaul, despite the operational constraints that were bearing down on us at the time, because the ship left the yard with too many items still to be completed. We picked those up in Norfolk—the ship came to Norfolk—and corrected those items.

I checked again on how well *Guam* is performing. Once we got through correcting those carryover discrepancies, the ship has performed well during the last 18 months or so.

Senator HUMPHREY. What about the allegations that it was not seaworthy when it left overhaul?

Admiral NUNNELEY. The Navy's position is that that simply is not true. There were some items that had to be corrected in Norfolk, as I said. In retrospect, we felt that the ship probably should have been kept in Philadelphia. It would have been more efficient to correct those discrepancies there, but there were a number of factors that were pushing the ship to get back to its home port and get ready for its deployment which was upcoming.

Senator HUMPHREY. Admiral Taylor, may we have your testimony?

STATEMENT OF REAR ADM. JAMES T. TAYLOR, CEC, USN, DIRECTOR, SHORE ACTIVITIES PLANNING AND PROGRAMING DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

Admiral TAYLOR. Good morning, Mr. Chairman. I am Rear Adm. James T. Taylor. I serve on the staff of the Chief of Naval Operations as Director of the Shore Activities Planning and Programing Division. I am responsible for shore base operations support policy, including real property maintenance.

While my testimony is entitled, "Navy Facilities and BMAR," it is important to note first that real property maintenance is just one of many programs which underpin Navy readiness.

To assess properly the state of real property maintenance in the Navy one must appreciate the relationships between these programs and the need to seek the most effective balance, so in my presentation I will first explain how facilities fit into the Navy's readiness picture and then discuss the real property maintenance business in the same context.

The subcommittee has asked that I talk to four particular aspects of real property maintenance—how we determine requirements, how we integrate the real property maintenance budget submission with the military construction budget, how we track execution of maintenance and repair, and where the Navy now stands on BMAR reduction.

The message I would like to convey here today in discussing these topics is that the real property maintenance budget request for fiscal year 1983 is based upon mission-essential requirements which have been balanced with other readiness factors; that the Navy is making progress in reducing the backlog of unfunded mission-essential requirements carried over from past years; and that with your continued support we will move ahead in making our Navy a first-rate, professional outfit both afloat and ashore.

FLEET READINESS AND SHORE FACILITIES

Fleet readiness—the ability of Navy ships, aircraft and weapons to perform assigned missions—depends directly upon our seagoing crews, their state of training, supplies on hand, and the material condition of their units. We measure and report fleet readiness in terms of these factors and structure fleet programs and budgets around them, yet fleet readiness ultimately depends upon the aggregate capabilities of both fleet units and shore bases.

Our combat crews are recruited and trained ashore. Their fuel, ammunition, spares and consumables come from land-based logistic networks. We communicate with them from shore stations, and they must periodically return to shore along with their ships, aircraft and equipment for revitalization and rest.

The capability of our shore bases to support fleet units depends upon our people at the bases, their training, supplies, and the material condition of their facilities and equipment. We measure and report the readiness capabilities of our shore bases, as well as manage related programs and budgets, in terms of these factors. By doing so, we are able to weigh requirements such as real property maintenance and construction against every other shore and afloat requirement.

By using the common denominator of readiness, we can produce budgets which reflect the optimum mix of all competing demands upon scarce resources. This approach requires a balancing act of major proportions as we try to allocate limited funds sensibly among growing demands.

Our primary goal is to squeeze literally every ounce of fighting capability out of our ships and aircraft. We also want to support all shore-base requirements that are vital to fleet support; however, in an environment of constrained resources we must sometimes reluctantly pass by some of our shore-base needs in favor of fleet operating requirements.

We achieve a balance by requiring the Navy's fiscal planners to develop complete and usable weapon packages, including shore-base assets and operating funds as integral parts. A clear example of this is the Trident system which, in addition to submarines, crews and missiles, includes shore facilities, base equipment, civilian end strength and O. & M. funds.

Fiscal planners in all Navy branches, such as air, surface, subsurface, communications, training and logistics, provide the same broad spectrum of coverage in their respective portions of the 5-year plan. These planners may trade off manpower for fuel or new airplanes for new hangers, or ship construction for real property maintenance. Every dollar committed to building a pier, operating bachelor housing, or patching runways is a dollar denied to fleet operational requirements, so it is absolutely imperative that we be able to cull our nonessential shore-base requirements, then weigh the essential ones against the most pressing fleet needs.

As I now begin to discuss the various aspects of real property maintenance of interest to this committee, I will point out just how this culling and weighing process is ingrained in the facilities business during all phases of budgeting and execution.

DETERMINING REQUIREMENTS

For 200 years the U.S. Navy has been grappling for answers to the question of "How much money and manpower is really needed to build, operate and maintain our shore bases?" Today, more than ever before, it is essential that we find the right answers to this question. However, finding the right answers is no easy task in real property maintenance.

Navy facilities wear out and sustain damage at diverse and unpredictable rates, depending on age, location, exposure, usage and degree of upkeep, and there is no way to forecast precisely the future maintenance and repair requirements of such a heterogeneous collection. Yet, fiscal practices dictate that needed funds be identified and justified on a Navy-wide basis far in advance of their eventual application.

Accordingly, at Navy Headquarters we plan maintenance and repair resource requirements based on a projected level of effort rather than on any list of specific projects. This level-of-effort approach to budgeting sets the real property maintenance program apart from the new construction program where budgeting is done on the basis of specific projects which have been identified and partially designed far in advance.

To accomplish effective level-of-effort planning we analyze historical data and identify relationships which exist between physical plant, shore-base missions, past expenditures, and the effect of those expenditures upon both plant condition and readiness. This analysis is done exclusively by my staff, using data submitted by our shore bases and major commanders.

The command chain repeatedly screens their requirements against six formal readiness criteria.

I am talking now about any projects that are in our backlog of maintenance or repair. In order to be considered reportable, they screen against these factors: Loss of mission, cost avoidance, life or death safety, quality of life, environmental catastrophy, and prudent judgment.

Any supposed requirement which does not meet one or more of these criteria is culled out and dropped from further consideration.

We provide the results of the analysis to the fiscal planners at Navy Headquarters to use in formulating their 5-year programs. Since our analysis is couched in terms of readiness and mission capability, the planners are able to weigh the requirements against other competing demands both afloat and ashore.

The balanced 5-year program created by planners serves as a baseline for subsequent budget preparation at major commands and shore bases. During budget preparation, real property maintenance requirements are once again weighed against all other operating demands, such as ship maintenance and flying-hour funding. If more critical demands arise that were not foreseen in prior planning, it may be necessary for commanders to adjust programs in order to meet those demands and retain an overall balanced readiness posture.

Major commands and shore bases submit their budgets to th Chief of Naval Operations, where my staff helps review real prop erty maintenance portions and assists in the presentation and support of these portions to OSD, OMB, and the Congress.

HOW MRP IS INTEGRATED WITH MILCON

One of the competing demands against which fiscal planners must weigh real property maintenance requirements is the requirement for construction of new piers, airfields, barracks, and other shore facilities. Since my office monitors both new construction and real property maintenance, we try to help the planners keep the two in balance.

To do this, we advise planners who need a new hanger or pier to recognize that the cost of the new facility entails both initial capital investment and ongoing operating costs; in other words, the support tail in the ensuing years.

I might add that although we do a pretty good job at that with a new facility such as Trident base and Trident programs, where there is a total weapon system, after 75 or 150 years it kind of loses its punch, yet we still have some of those facilities which we must take care of.

The planner's final decision to construct a hangar or pier, therefore, includes a commitment to support the facility throughout its service life.

The second way in which we help planners balance real property maintenance and new construction is by recommending replacement of rundown or expensive to run facilities with new, efficient ones. Almost 75 percent of our facilities are over 26 years old and 30 percent of these exceed 40 years in age, so the potential for replacement is great.

EXECUTION TRACKING

Execution of the real property maintenance budget is tracked by both engineers and accountants at all organizational levels which contribute to real property maintenance. Execution of daily maintenance and minor repair work is tracked on a job-by-job basic by individuals on each base commander's staff; execution of major repair projects is tracked on a project-by-project basis by major command staffs; and overall resource expenditures and results are tracked at Navy Headquarters.

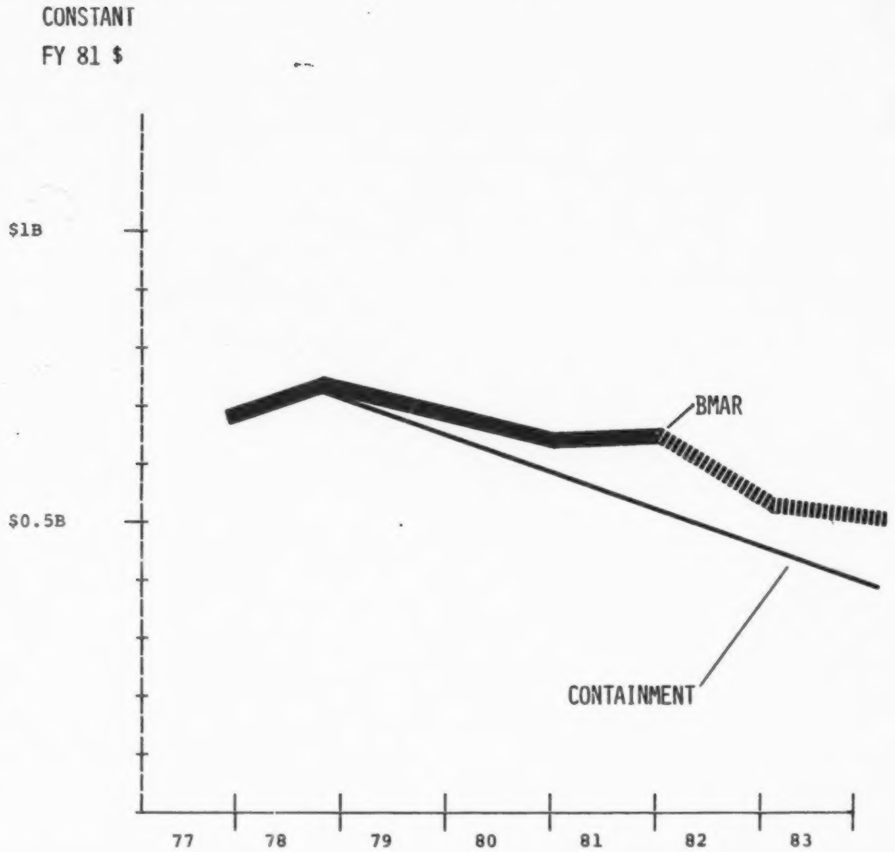
To do the latter, we collect summary reports for both base level and major command level maintenance and repair accounts which are periodically submitted to Navy Headquarters through the command chain. My staff routinely reviews these reports, along with other readiness data, and assesses progress on a Navy-wide basis.

The readiness data come from two main sources—a readiness report similar to the Fleet Unitrep and an annual report of facility condition and BMAR. Both reports are initiated by base commanders and reviewed by the command chain.

BMAR REDUCTION

Since 1978 we have been consciously striving to reach the BMAR ceiling limitation which Congress established in fiscal year 1978.

NAVY IS CONTROLLING BMAR



You can see by the attached chart that we have made progress; however, BMAR is still over $600 million. Our Atlantic Fleet reports a BMAR of $195 million; the Pacific Fleet, $123 million; and our training command, $150 million. The fleet is not getting uniformly adequate support because many competing priorities on our limited resources permit only gradual, long-term facility improvements.

The fiscal year 1983 budget request for real property maintenance funds is about the same as the fiscal year 1982 appropriated level. We are actively seeking innovative ways to continue the reduction of BMAR and improve facility conditions within the shore-base operating budget.

We are refining our base readiness reporting system, examining the fiscal structure of our operating account, strengthening our goal-setting system and exploring alternative ways to achieve operating flexibility in the MRP account. I am optimistic that our long-term efforts will achieve the necessary results in terms of both shore-base readiness and BMAR reduction.

I might add that the chart "Navy is controlling BMAR" shows a general downturn of the backlog reported. It also assumes in that

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dotted line the passsage of the 1982 supplemental which contains a $75 million infusion for purposes of real property maintenance.

That is a brief summary sir, and I stand by for your questions.

Senator **Humphrey**. You have a $75 million supplemental for what purpose? Why is that necessary?

Admiral **Taylor**. The fiscal year 1982 supplemental includes $75 million in it for real property maintenance.

Senator **Humphrey**. Why is that necessary?

Admiral **Taylor**. Simply to maintain this downward curve of reflecting the wishes of the Congress on the maintenance of real property. The requirements exist. We are trying to be responsive. We are finding that the properties and facilities reported in this backlog are readiness related and need correction.

Senator **Humphrey**. Maybe this is not the right forum for a discussion of this subject, but it just seems to me that BMAR is something that ought to be included in the annual request for appropriations and not in a supplemental.

Did the Navy specifically ask for the $75 million for BMAR in the supplemental?

Admiral **Klein**. I would like to respond to that, Mr. Chairman.

Senator **Humphrey**. Yes, Admiral Klein.

STATEMENT OF REAR ADM. VERLE W. KLEIN, USN, DIRECTOR, OPERATIONS DIVISION, FISCAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

Admiral **Klein**. Our operation and maintenance supplemental consists of almost all must-fund items, such as unemployment compensation, utility rate increases. The one item that does not absolutely have to be funded in fiscal year 1982 is real property maintenance. This was added by OSD because of the criticality of BMAR and its contribution to readiness.

You are absolutely right, however, in that it is not a must-fund item, where the other items are bills that are going to have to be paid.

To the extent that supplemental does not fund these items, as I stated the other day, sir, we will have to reduce approved readiness programs in order to finance them.

Senator **Humphrey**. The other items in BMAR are affected by inflation and so on?

Admiral **Klein**. Are you talking about inflation-driven BMAR?

Senator **Humphrey**. I am talking about the other items in the Supplemental. Ordinarily, supplementals are things that weren't anticipated, fact-of-life problems.

Admiral **Klein**. That is right.

Senator **Humphrey**. BMAR seems a little peculiar. I don't begrudge it to you, but it does not quite add up.

How far short of the 1982 request for BMAR was the 1982 appropriation? Did you get what you requested?

Admiral **Taylor**. Let me take that question for the record, sir.

[The information follows:]

FISCAL YEAR 1982 MRP REQUEST

The Navy's fiscal year 1982 request for real property maintenance funds was $650 million, excluding the supplemental request. The Congress appropriated an additional $43 million expressly for BMAR reduction, bringing the total to $693. However, the appropriation bill was not passed until the fiscal year was well underway, thus restricting the availability of the appropriated funds to base commanders and causing them to lose ground in their efforts to reduce BMAR. The $75M supplemental request was submitted to regain some of the lost momentum and help accelerate BMAR reduction. If the supplemental funds are not appropriated we anticipate BMAR to rise to $661M by the end of fiscal year 1982 rather than fall to $580M as now predicted.

Senator HUMPHREY. You are projecting in any case a continued decline in BMAR even though it is diverging a little bit from the containment line, is that correct, if you get what you requested, including the 1982 supplemental?

Admiral TAYLOR. If we get what is included in the 1982 supplemental, yes, sir. If not, it would appear that the BMAR would be on a slight increase.

Senator HUMPHREY. What about military construction, do you maintain any kind of dollar compilation of construction projects you know are necessary but are not being funded?

Admiral TAYLOR. Yes, sir. We have military construction; it is derived from a long list of projects that are derived by studying the shore bases' missions and we compile a list of capital investment programs that are required in the Navy.

Senator HUMPHREY. What does that line look like?

Admiral TAYLOR. That line is several billions of dollars.

Senator HUMPHREY. The trend is what I am interested in.

Admiral TAYLOR. The military construction funding has increased from a level in 1981 that was running around $700 or $800 million to an increase to $1.4 billion in 1982. It will remain in 1983 above $1 billion and increase in 1984; at least it is projected to increase in 1984.

Senator HUMPHREY. Are you saying that it is steadily increasing?

Admiral TAYLOR. Yes, sir; in a general trend it is increasing. I think that reflects the Navy's recognition of the aging plant and its new weapon systems. In addition to that, I think it reflects some of the initiatives of our leadership for the quality-of-life programs of the Navy which require capital investment ashore—chapels, BEQ's, and the like.

Senator HUMPHREY. Thank you. I think we have accomplished what we needed to do this morning. We will submit a number of questions. In fact, you have been asked to supply some answers for the record. We will leave the record open for 15 days for the submission of required material.

[Questions with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY

OVERHAUL PROGRAM

Senator HUMPHREY. Admiral Nunneley, how does the actual fiscal year 1983 overhaul program compare to the fiscal year 1983 program projected in fiscal year 1980?

Admiral NUNNELEY. The following table is a comparison between OPNAVNOTE 4710 of Oct. 10, 1980, and the fiscal year 1983 Overhaul Program budget submission. The OPNAVNOTE is the Navy's planning document for shipyard overhaul forecasting. It is provided to many agencies needing overhaul forecasting information and is used strictly for planning purposes. The overhaul program for a given fiscal year undergoes several iterations during its development. The schedule is reviewed and revised due to shipyard workload leveling, operational commitments and changes in overhaul cycles. In fact, the OPNAVNOTE of Oct. 10, 1980, does not contain actual dates for the fiscal year 1983 column, only an X is annotated to reflect fiscal year 1983 overhauls.

	OPNAVNOTE of Oct. 10, 1980	1983 budget submission
SSBN	3	3
SSN	10	10
CVN	1	1
CV	1	1
CG	4	4
CGN	2	2
DD Types	34	[1] 28
Amphibs	7	[2] 5
Service Force	5	[3] 8
ARS/ATS/ASR	5	[4] 2
PHM	2	[5] 0
AS	2	[6] 1
MSO	1	1
Total	77	66

[1] 2 FF's transferred to the active reserves. 4 FF's were readjusted because of operational requirements.

[2] LST and LSD were readjusted because of operational requirements.

[3] AE and AO originally scheduled for inactivation were retained to meet operational requirements. AFS shifted into fiscal year 1983 due operational consideration.

[4] 2 ASR's operating cycles extended to 6 years. ATS readjusted because of operational requirements.

[5] 1 PHM did not deliver on time; 1 PHM did not have enough foil-borne hours to warrant overhaul.

[6] AS operating cycle extended.

Senator **Humphrey**. Admiral Nunneley, what is the likelihood that the fiscal year 1983 overhaul program will be executed as planned?

Admiral **Nunneley**. The execution of the fiscal year 1983 overhaul program has been thoroughly reviewed by the Fleets, Type Commanders, SUPSHIPS and the performing public shipyards. There is sufficient capacity and capability in both the public and private sector to execute this program. It should be recognized that the start of the fiscal year 1983 overhaul program is still over 6 months away, and unexpected operational requirements can always cause changes to the overhaul schedule for individual ships.

EXECUTION OF 1981 PROGRAM

Senator **Humphrey**. Admiral Nunneley, compare the programed fiscal year 1981 overhaul and modernization plan with that actually executed?

Admiral **Nunneley**. The following table compares the fiscal year 1981 overhaul and modernization plan, as outlined in the fiscal year 1981 congressional budget, with what was actually executed.

	1981 Congressional budget	1981 execution
SSBN	4	4
SSN/SS	9	[1] 7
CV	1	[2] 0
CG/CGN	5	5
DD/DDG/FFG/FF	21	[3] 20
AOE/AOR	3	2
Amphibs	13	[4] 15
ATS/AGF/ARS/ASR	5	[5] 7
AGF	1	1
AS	1	1
AGDS	1	1
AR	1	[6] 0
PHM	1	[7] 0

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	1981 Congressional budget	1981 execution
AD	2	2
MSO	2	2
Total	70	67

[1] USS Barbel (SS 580) and USS Blueback (SS 581) were delayed to fiscal year 1982 due to workload adjustments.

[2] USS Enterprise (CV 65) overhaul extension made deferral of USS Constellation (CV 64) overhaul a necessity in order to meet CV deployment requirements. Discussed during fiscal year 1981 budget hearings.

[3] USS Ramsey (FFG 2) overhaul was delayed about 1½ months, from fiscal year 1981 to fiscal year 1982, to provide room for the USS Bronstein (FF 1037) in Long Beach Naval Shipyard. The private contractor awarded Bronstein overhaul went out of business.

[4] USS Iwo Jima (LPH 2) overhaul was advanced by 1 month, from fiscal year 1982 to fiscal year 1981, to allow the ship to be overhauled in homeport. The USS Tarawa (LHA 1) was advanced 1½ months, from fiscal year 1982 to fiscal year 1981, to correct specific class problems to enable the ship to meet deployment date.

[5] Decision made to retain the USS Florikan (ASR 9) and the USS Kittiwake (ASR 13) in the active fleet.

[6] USS Vulcan (AR 5) was deleted from the fiscal year 1981 program when it was being considered as a force level reduction. The decision was subsequently reversed and the overhaul was reinstated in the fiscal year 1982 program.

[7] USS Pegasus (PHM 1) did not have sufficient foil-borne hours of operation to warrant overhaul.

ALTERNATIVE CONTRACTING METHODS

Senator HUMPHREY. Admiral Nunneley, what alternative contracting methods are being tested or implemented by the Navy?

Admiral NUNNELEY. In the past the Navy traditionally used the Invitation for Bid in contracting for overhauls and restricted availabilities. As more complex ships enter the private sector it has become increasingly important that contract award consider the capability of the potential contractor as well as the bid price. As a result the Navy is increasing its use of the Request for Proposal as the vehicle for awarding these contracts. The Request for Proposal is used as the vehicle for award in two ways. The first is under a two phase negotiation during which the proposals are first reviewed for technical content. The contract is then awarded to that bidder found at least minimally qualified technically who has submitted the lowest price. Three overhaul contracts have been awarded using this process thus far in fiscal year 1982 with one additional fiscal year 1982 and two fiscal year 1983 overhauls presently being solicited using this method. The second method is using formal source selection procedures where cost is only one of many factors evaluated. Other factors include management, planning, technical capability, resources and experience. This is being used primarily with cost and most multi-ship contracts. In fiscal year 1982 four multi-ship contracts have been awarded including eight regular overhauls and three Selected Restricted Availabilities. Three of these packages were cost type contracts. In fiscal year 1983, ten multi-ship packages are planned encompassing twenty one overhauls and eighteen Selected Restricted Availabilities. The Navy is also increasing its use of contracts which involve the contractor in planning the availabilities he will be executing.

USS ENTERPRISE OVERHAUL

Senator HUMPHREY. Admiral Nunneley, the carrier *Enterprise* recently left Seattle late and overbudget. What policies have been initiated to ensure this does not happen again?

Admiral NUNNELEY. The Navy has undertaken many managerial initiatives to improve nuclear ship overhauls. Among them are:

A. Prior to commencement of overhaul, an independent study group reviews each nuclear ship work package, along with the amount of nuclear work scheduled at the designated shipyard. From these reviews adjustments are made, as required, to minimize the risk of exceeding planned overhaul durations.

B. Steps have been taken to more evenly distribute nuclear overhauls among the six nuclear shipyards so as to avoid the heavy overlap that occurred at Puget Sound Naval Shipyard.

C. The Supervisor of Shipbuilding at Newport News Shipbuilding and Drydock Company is maintaining close liaison with Puget Sound Naval Shipyard and is applying the "lessons learned" from *Enterprise* to the planning for the fiscal year 1983 overhaul of *Nimitz*.

D. Action has been taken to alleviate the problem with recruiting and retaining sufficient numbers of nuclear qualified technical personnel in the Civil Service.

The Navy has a detailed analysis of the *Enterprise's* overhaul underway and expects to implement numerous additional improvements, as they develop.

Senator HUMPHREY. Admiral Nunneley, what is the Navy's projected demand for shipyard workers and how will this demand shift among the public shipyards?

Admiral **Nunneley**. The Navy is projecting a requirement for 76,335 shipyard workers in the public shipyards in fiscal year 1983. A preliminary distribution of the total requirement has been made among the eight public shipyards. Since the assignment of fiscal year 1983 work to the public shipyards has essentially been completed, it is not anticipated that there will be a significant change in the final distribution of shipyard workers between the public shipyards. This assumes however, that there is no major change in the current homeporting plan and that there are no programmatic changes in public shipyard overhauls resulting from scheduled changes, caused by an unanticipated increase in Navy ship operational commitments.

MODIFICATION INSTALLATION

Senator **Humphrey**. Admiral Martini, does DOD agree with the Navy's dollar estimate of the unfunded amount of modification installation?

Admiral **Martini**. Yes, the $102.8M modification installation backlog is displayed in the OSD approved fiscal year 1983 budget.

Questions Submitted by Senator Carl Levin To Be Answered for the Hearing Record

OVERHAUL PRICING POLICY

Senator **Levin**. Admiral Nunneley, I would like to discuss the new pricing policy for ship overhauls and how this policy relates to modernization of our public shipyards.

In general, how do our public shipyards compare to private shipyards in this country and in countries such as Japan in terms of modern equipment, capacity and capability?

Admiral **Nunneley**. Facilities in the public shipyards date back in many cases to the 19th century. Advanced technology in ship system development has grown much more rapidly than the ability of the Navy to modernize the public shipyards to accommodate the increased complexity. Many of the public shipyard facilities are poorly laid out and are inefficient in performing ship repair functions. The average age of equipment in the various shops is 18.5 years. In many instances, pier facilities, drydocks, and hotel services are inadequate to meet the requirements of our newer ships with complex nuclear and combat systems. Many of the buildings are old and dilapidated. They lack adequate lighting and ventilation to meet existing Occupational Safety and Health Act standards and adequate power for equipment operation. The Navy is currently pursuing a shipyard modernization program that is designed to upgrade the public shipyards facilities and equipments to state-of-the-art conditions. The program was originally scheduled to complete by the late 1970's however, funding constraints, particularly in the MILCON and OPN appropriations, and inflation have extended this moderniation program well into the 1990's. To improve the productivity of our public shipyards as well as assure that they have the capability to handle new ships and their systems, a strong commitment to support the Shipyard Modernization Program is absolutely essential.

Many of the private shipyards are no better off then the public shipyards. The decline of the U.S. merchant fleet since World War II and increased costs have contributed to a depressed shipbuilding industry. Hence, many of the private shipyards have not had the capital to invest in facility improvements. Most of those that have, are owned by large conglomerate corporations such as Litton (Ingalls Shipbuilding), Tenneco (Newport News Shipbuilding), and Congoleum (Bath Iron Works). Shipyards owned by these large corporations have been able to modernize their facilities thereby improving their capability.

In Japan, many of the shipyards are quite modern as they have been built since World War II. The Japanese have been very competitive in building large bulk carriers. These large ships are relatively simple ships as compared to warships with sophisticated electronic and weapons systems. Hence, the modern facilities in Japan consist essentially of large building docks, heavy lifting equipment and extensive steel fabrication facilities.

Senator **Levin**. Admiral Nunneley, as I understand this new pricing policy, we will be funding shipyard modernization through the cost of ship overhauls. How, exactly, will this new policy work, and how does it differ from our previous policy for modernizing our public shipyards?

Admiral **Nunneley**. I wish to make it clear that the new pricing policy only applies to industrial fund capital equipment in public shipyards which, heretofore, was programmed through the OPN appropriation. A large portion of the public shipyard modernization program has been, and will continue to be, the modernization of facilities which is funded through the MILCON appropriations. A smaller portion is funded through the OMN appropriations. The new pricing policy for industrial fund capital equipment requires that the customer pay for the new equipment purchases through a manday rate that includes a factor for equipment depreciation as a part of overhead as well as costs for labor and material. This allows the public shipyards to operate similar to private industry where the cost of operations reflects an equipment depreciation charge which is paid by the customers. For ship overhauls, the Type Commanders are the customer for ship repairs and the Naval Sea Systems Command is the customer for ship modernization. The Type Commanders and the Naval Sea Systems Command will be provided an appropriate increase in OMN funding to accommodate the increased manday rate.

Senator LEVIN. In your opinion, does this change in policy represent an improvement over past practice? Why or why not?

Admiral NUNNELEY. Yes, this policy change represents an improvement over past practice. It is more consistent with the criteria used in the private industry and is expected to provide a higher level of capital investment than experienced under past practice. Further, this new policy will preclude industrial fund capital equipment from competing with higher visibility equipments, such as weapons systems procurements, which were also funded in the OPN appropriation under the old policy. In order to improve productivity and reap benefits from new, state-of-the-art equipment, it is necessary that old and obsolecent equipment be replaced in a systematic manner. This new policy will enable the Navy to better manage modernization of the public shipyards through equipment replacement.

INDUSTRIAL PLANT EQUIPMENT ACQUISITION FISCAL YEAR 1984

Senator LEVIN. Admiral Nunneley, your statement says that "The budget targets for industrial plant equipment acquisition in fiscal year 1984 and the following years are approximately 5 percent of estimated gross annual shipyard revenues." You then go on to say that "the fiscal year 1983 budget will fall substantially below this target."

By what amount does the fiscal year 1983 budget fall below the five percent target? Are we only partially implementing this new policy for shipyard equipment modernization in fiscal year 1983?

Admiral NUNNELEY. The fiscal year 1983 budget level cannot be compared to the 5 percent target. Fiscal year 1983 is the first year that the new capital equipment funding procedures will take effect and $145 million has been established as the obligational target for public shipyards. This is more than double the previous year level. Cash outlays in this year will be substantially less than this level because the procurement lead time for these types of equipments usually requires at least two years. The cumulative total of cash outlays in fiscal year 1984 and outyears will eventually build up to, and level out at, approximately 5 percent of the estimated gross annual shipyard revenue. For example, only about $29 million of the $145 million target will actually be expended during fiscal year 1983. Hence, while the Navy is fully implementing this new policy in fiscal year 1983 only sufficient funds are being programmed to accommodate the estimated dollar outlay for that year. The remaining outlay will occur in the following years and will be funded in the industrial fund rate structure in accordance with capital equipment depreciation policy. Outlays in fiscal year 1984 and outyears, will be additive to the fiscal year 1983 outlays and will eventually reach the 5 percent levels.

SHIPYARD CAPITAL EQUIPMENT

Senator LEVIN. Admiral Nunneley, what are the added costs in the Navy's O&M account as a result of funding shipyard equipment modernization through the price of ship overhauls? Where there corresponding reductions made in the Other Procurement, Navy account in fiscal year 1983 for equipment that will now be bought in O&M.

Admiral NUNNELEY. The added cost in funding the shipyard capital equipment is $29 million. Appropriation transfers were made to reduce the OPM appropriations and increase the customer appropriations (OMN, R&D, etc.) by this amount in fiscal year 1983.

Senator LEVIN. Admiral Nunneley, how much additional funding in fiscal year 1983 would be necessary to bring the fiscal year 1983 funding to the 5 percent target you have set for fiscal year 1984 and beyond?

Admiral NUNNELEY. As explained earlier, additional fiscal year 1983 funding is not required because fiscal year 1983 is the initial year of this new program. Cumulative total of cash outlays in fiscal year 1984 and beyond will increase and level off at approximately the 5 percent level indicated.

SHIP MAINTENANCE AND ALTERATION

Senator LEVIN. Admiral Nunneley, chart No. 14 of your statement shows a startling 65 percent growth in the Navy's ship maintenance and alteration request from fiscal year 1980 through fiscal year 1983. Even discounted for inflation, this would be a substantial level of growth.

What accounts for this large growth? Have ships become substantially more complex and difficult to maintian since fiscal year 1980?

Admiral NUNNELEY. We have generally not increased planned overhaul durations or the number of mandays to be accomplished during overhauls. There are several reasons for the increase in the cost of the program. Costs for each ship in the fiscal year 1983 program are higher due to financing procedure changes directed by the 97th Congress. The changes require that:

a. Costs of advance material for public shipyard overhauls be charged to the ship in the year of induction rather than prior year (advance funding) as was the case in fiscal year 1980.

b. Cost of change orders be charged to the ship in the year of induction rather than in subsequent year as previously budgeted.

In addition, migration of costs from procurement accounts to O&M,N includes replacement of capital equipment in Naval shipyards, depot level repairables and initial outfitting associated with ship modernization.

The fleet is increasing in complexity and as these newer, more complex ships are inducted into overhaul more mandays are required to do the work. The fiscal year 1983 program includes an additional nuclear carrier, two nuclear cruisers and six additional combatant surface ships as compared to the fiscal year 1980 program. On the other hand, the nuclear submarines being overhauled are of older types that cost more to overhaul. Further, there is an increase of 57 percent in the number of selected restricted availabilities in the fiscal year 1983 program as compared to the 1980 program.

Inflation has also added significantly to the costs of the program with manday costs in the private sector projected to increase from 25 to over 50 percent in some locations by fiscal year 1983 when compared to the fiscal year 1980 experience.

CONTROLLING OVERHAUL COSTS

Senator LEVIN. Admiral Nunneley, how successful has the Navy been in controlling overhaul costs? How does the average overhaul cost of a destroyer in fiscal year 1980 compare to your projections for the average destroyer overhaul in fiscal year 1983?

Admiral NUNNELEY. The Navy is having success controlling the amount of work being accomplished on our ships during overhaul. Ships being overhauled are generally being scheduled for the same number of mandays and the same durations in fiscal year 1983 as they were in fiscal year 1980. In some cases we are programing fewer mandays and shorter overhaul durations to increase the availability of these assets to the Type Commanders for operations. Our success in constraining mandays is not, however, directly reflected in the dollars budgeted for overhauls. For example, the cost of an average non-nuclear destroyer overhaul will be about fifty percent higher in fiscal year 1983 than it was in fiscal year 1980. This cost increase reflects a number of factors. First, labor rates in public shipyards will increase significantly as a result of charging customers for depreciation of capital equipment. Heretofore, capital equipment was replaced by appropriated funds. Second, migration of depot level repairables to the Navy Stock Fund commenced in fiscal year 1981 which caused increased costs to be reflected directly in the overhaul. Third, the cost of ship overhauls will increase because of a change in financing procedures that requires change orders and advance material for public shipyards to be financed in the year of induction rather than in the following year or prior year respectively. Fourth, the average manday costs in the private sector are projected to increase from 25 percent to over 50 percent in some locations during this period. Additionally, there are the effects of less tangible influences included such as requirements placed on industrial activities to abide by governmental standards for safety and pollution.

OVERHAUL COSTS

Senator **Levin**. Admiral Nunneley, how do overhaul costs for similar ships compare for public and private shipyards? Is one generally less costly than the other?

Admiral **Nunneley**. It is extremely difficult to directly compare costs as ship work packages and manday rates vary considerably from location to location. The data that we do have on ship classes which had ships completing overhaul in both the public and private sectors in the period 1977–1981 indicates that the costs are roughly consistent for private and public yard. For these classes the public shipyards compared to the private shipyards were:

FF-1052—2 percent lower.
LPD-4—3 percent lower.
SSN-594—12 percent higher.
SSN-637—same.

Senator **Levin**. Admiral Nunneley, does the 70/30 percent distribution of repairs and ship alterations between government-owned and private shipyards currently prescribed by law allow the Government to receive the best possible price for this work?

Admiral **Nunneley**. Yes, the 70/30 percent distribution of ship repairs and ship alterations between public and private shipyards allows the Government to receive optimum fleet support for the best price. To arrive at this conclusion, there are a number of factors to be considered. The first is work quality. The current amount of alteration and repair work assigned to the private sector is comprised primarily of the simpler ships, without sophisticated systems. The private shipyards can generally meet satisfactory quality standards on these ships. If more complex ships were assigned to the private sector, sophisticated combat systems work would have to be performed. Experience to date in assigning work of this nature to the private sector has frequently proven to be more costly and still of poor quality. The second factor is timeliness, with the shortage of ships in the Navy today, it is necessary that ships assigned to the overhaul periods be completed in a timely manner to enable them to carry out their operational requirements. Assigning more complex ships to the private shipyards which generally lack expertise to perform the work would jeopardize timely completion, place undue risk in meeting national commitments or extend other ship deployments to excessive durations. A third factor is personnel considerations. The current 70/30 criteria appears to be the optimum distribution to accommodate the Navy's policy of improving crew home and family life by assigning overhauls in homeport to the maximum extent possible. Increasing the percentage of work assigned to the private shipyards would require a decrease in the percentage of assigned work to public shipyards in their homeports.

Conversely, if more work were assigned to the public yards, the less complex ships that are currently overhauled in the private sector would be overhauled in public shipyards. This additional workload would have to be accompanied by an increase in public shipyard workforce where ceiling and workyear constraints would inhibit balancing workload and workforce. Further, less work would be available for the private sector and would tend to reduce the industrial base available for ship overhauls and mobilization potential.

In summary, experience with the 70/30 split over the past several years has confirmed that this distribution provides the optimum maintenance support for the optimum price.

NAVY BMAR

Senator **Levin**. Admiral Taylor, Admiral Miller, the Navy's Budget Officer, testified last week that the backlog of real property maintenance in the Navy increases from fiscal year 1982 to fiscal year 1983.

The chart on the last page of your statement suggest a slight reduction in the backlog of real property maintenance in fiscal year 1983.

Will the Navy's backlog of real property maintenance increase or decrease under the proposed fiscal year 1983 budget?

Admiral **Taylor**. Stated in the budget (then-year) dollars, Navy BMAR is projected to increase from $580M at the end of fiscal year 1982 to $611M at the end of fiscal year 1983. My chart illustrates the actual workload represented by the BMAR and, thus, is based on constant dollars. Stated in terms of constant fiscal year 1982 dollars, Navy BMAR is expected to decrease from the $536M at the end of fiscal year 1982 to $532M at the end of fiscal year 1983. If the $75M supplemental funds are not appropriated as requested for fiscal year 1982, Navy BMAR is predicted to respond as follows:

BMAR WITHOUT $75M SUPPLEMENTAL

[In millions of dollars]

	End fiscal year 1982	End fiscal year 1983
Then year	661	680
Constant fiscal year 1981	611	593

Senator **Levin.** Admiral Taylor, I am sure you will agree that some maintenance projects have a more direct impact on mission capability than others. Resurfacing a deteriorating runway is more important from the standpoint of a Navy base's mission than, say, putting a new roof on the post exchange.

Right now, as I understand the concept of the backlog of maintenance and repair of real property, you don't make any distinction as to what portion of the backlog represents high-priority mission essential requirements and what portion represents less-immediate requirements.

Why don't you coin a new acronym—BEMAR—or Backlog of Essential Maintenance and Repair—to replace BMAR, so that the Congress has a better idea of what your backlog of mission-essential, readiness-related maintenance requirements really are?

Admiral **Taylor.** As I explained in my formal statement, the Navy command chain repeatedly screens facility maintenance and repair requirements to identify and accomplish projects which have the most direct impact on mission capability. Navy BMAR contains only those high priority, mission-essential requirements which meet one or more of six, formal readiness criteria: loss of mission, cost avoidance, life or death safety, quality of life, environmental catastrophy and prudent judgement. In my opinion the acronym BEMAR—Backlog of Essential Maintenance and Repair—would be more descriptive than the currently-used BMAR acronym. However, the BMAR acronym is prescribed by OSD, and the Navy is required to use it.

Senator **Levin.** Of the over $600 million backlog you now have in the Navy, what portion represents mission-essential, readiness-related projects? Please provide a breakdown of this $600 million figure by types of projects for the record.

Admiral **Taylor.** At the end of fiscal year 1981 our bases and major commands reported a backlog of unfunded totalling $1.4B. Of this total, less than half ($644M) were judged to meet the high-priority, mission-essential BMAR criteria. The following table shows the distribution of mission-essential BMAR by type of project:

[In millions]

Type facility:	*BMAR*
Primary mission operations:	
Airfields	$59.2
Communications	7.7
Ports	84.4
Misc. operations	5.1
Training	18.7
Aircraft maintenance	29.6
Ship maintenance	1.9
Misc. maintenance	18.1
R.D.T. & E	20.6
Bulk liquid fuel storage	38.6
Ammunition storage	2.6
Cold storage	49.6
Personnel operations:	
Medical	23.2
Housing and messing	80.5
Morale, welfare, recreation	52.2
Base ownership operations:	
Administration	23.8
Utility plans and systems	73.5
Roads, grounds, trackage	54.7
Total	644

FISCAL YEAR 1983 MRP REQUEST

Senator **Levin**. Admiral Taylor, in fiscal year 1983 the Navy is requesting approximately $700 million for real property maintenance. This compares to an Army request of $1.3 billion and an Air Force request of $1.2 billion. Why is the Navy spending so much less than the other Services in real property maintenance activities? Does it consider these projects less contributory to readiness or retention than the other Services?

Admiral **Taylor**. I have no information regarding the Army and Air Force real property maintenance requests, however the Navy's request for fiscal year 1983 real property maintenance funds represents 1.74 percent of the plant replacement value. We want to support all shore base requirements that contribute to readiness and retention, however, in an environment of constrained resources we must sometimes reluctantly pass by some of our shore base needs in favor of fleet operating requirements. The Navy's budget reflects the optimum mix of all fleet and shore base demands upon scarce resources.

CONDITION OF FACILITIES

Senator **Levin**. Admiral Taylor, are Navy facilities in better condition than the facilities of the other Services?

Admiral **Taylor**. I have no information regarding the condition of Army, Air Force or Marine Corps facilities. However, the condition of Navy shore facilties is a serious problem. In October 1981, we solicited professional opinions from commanding officers of the Navy's major shore bases regarding base readiness. Many of these commanding officers believed that they were only marginally capable of performing their assigned missions. Fifty-six percent of the commanding officers reported C3/C4 in their ability to provide basic port services to warships; half of the bases could not provide suitable housing and related services for their bachelor officers and enlisted men; and more than one-quarter of the fleet air stations rated themselves C-3 in ability to accommodate peacetime flight operations. The most common cause cited for marginal mission capability was the advanced deterioration of piers, barracks, airfields and other facilities of the physical plant.

CARE OF FACILITIES

Senator **Levin**. Admiral Taylor, is the Navy's operational requirement underfunded to the extent that their facilities must be neglected more than those of the Air Force or the Army?

Admiral **Taylor**. While it is true that the Navy's real property maintenance account is leaner than we would all like to see, I cannot agree that our facilities are being neglected. Since 1978, when Congress established the "BMAR containment policy" the Navy has reduced the constant dollar size of its mission-essential BMAR from $705M to $644M.

REWORK SHORTFALL

Senator **Levin**. Admiral Martini, in two of the five subcategories of depot maintenance—aircraft rework and modification installations—your fiscal year 1983 request does not fully fund your requirements. Your shortfall in modification installations is $102 million. What do you project your shortfall to be in aircraft rework?

Admiral **Martini**. Current experience in fiscal year 1982 indicates that actual rework requirements are significantly higher than anticipated. If this trend continues, the fiscal year 1983 aircraft rework backlog (excluding modification installations) could be as high as $190M.

READINESS IMPACT

Senator **Levin**. Admiral Martini, what will be the impact of these funding shortfalls in fiscal year 1983 in terms of aircraft mission-capable rates and other readiness indicators?

Admiral **Martini**. We anticipate some impact on fiscal year 1983 mission capable rates because of increases in airframes on extension and bare firewalls. However, we do not expect the immediate impact on fleet readiness to be significant.

FUNDING DETERMINATION

Senator **Levin**. Admiral Martini, how did the above funding shortfalls occur?

Admiral **Martini**. Rework requirement projections for fiscal year 1981 and fiscal year 1982 were based on the operational activity levels programmed by the previous administration.

Senator **Levin**. Was it the result of a conscious decision by the Navy to underfund aviation depot maintenance in order to fund something else?

Admiral **Martini**. No sir, we have experienced significantly higher rework requirements than anticipated due to the increases in operational activity levels projected by the current administration over what was planned previously.

MODIFICATION PROCUREMENT

Senator **Levin**. Admiral Martini, as you point out in your statement, the funding for modifications is included in two accounts—procurement and O&M. You buy the equipment or kits for the modification in procurement, and the cost of labor and installation of these kits is in O&M. How does the $102 million shortfall you mention for modification installation in the O&M account in fiscal year 1983 relate to the procurement of modification kits in the Aircraft Procurement, Navy account?

Admiral **Martini**. The Aircraft Rework Program funds the cost of labor and consumable material needed for the installation of aircraft modifications. The Aircraft Procurement, Navy appropriation funds the engineering, tooling, and material required for aircraft modifications, including kits. Modification procurement and installation requirements are coordinated to ensure that balance is maintained between them. Modification installation funding requirements are based on kit inventories and material delivery schedules. Consequently, the $102.8M fiscal year 1983 modification installation funding shortfall affects only the installation of modifications procured prior to fiscal year 1983.

Senator **Levin**. As the budget now stands, will you be buying modification kits in fiscal year 1983 and then not have the O&M money to install these kits?

Admiral **Martini**. No, installation requirements associated with modification kits procured in fiscal year 1983 are included in the Navy's outyear rework requirements.

UNEXECUTED MODIFICATIONS

Senator **Levin**. Admiral Martini, what specific aircraft modifications will not be executed in fiscal year 1983 due to your $102 million shortfall in the modifcation installation line?

Admiral **Martini**. The following aircraft modifications were not included in the fiscal year 1983 modification installation budget, but do exist as unfunded fiscal year 1983 modification installation requirements.

1 EC-130Q SLEP
1 C-130F SLEP
3 KC-130F SLEPs
10 A-7E FLIR configurations
18 A-6E TRAM configurations
3 EA-6B ICAP II configurations
E-2C updates
P-3C field modifications
S-3A main leading gear modifications
H-3 self retaining bolt modifications

In addition, approximately 25 percent of the Operational Safety Improvement Program modifications scheduled for installation by organic facilities in fiscal year 1983 cannot be accomplished. These reductions, delays, and deferrals of important aircraft modifications will have an unacceptable impact on the readiness and capability of the affected aviation communities. Consequently, some rebalancing of resources within the aircraft rework program will be required.

REPROGRAMING FUNDS

Senator **Levin**. Admiral Martini, Admiral Miller, the Navy's Budget Officer, told the subcommittee last week that you would probably reprogram funds within the five categories of aircraft depot maintenance to cover at least a portion of the shortfall in modification installations. Is this what you will do?

Admiral **Martini**. Yes, the entire $317.2M modification installation requirement in fiscal year 1983 is valid and will require rebalancing of aircraft rework funding.

Senator **Levin**. Does this mean we will have backlogs of airframes, engines and aircraft components awaiting depot maintenance at the end of fiscal year 1983?

Admiral **Martini**. Yes, the result may well be an increase in the aviation depot maintenance backlog.

BASELINE STUDY

Senator **Levin**. Admiral Martini, what are the preliminary conclusions of the Baseline Plan study for Naval Air Rework Facilities' capability, capacity and manpower?

Admiral **Martini**. The initial results of the Baseline Plan generally indicate that our current depot structure provides insufficient personnel at the NARFs to fulfill projected mobilization surge/wartime requirements. No specific conclusions can be reached on capability and capacity issues until Baseline results are finalized later this year.

NARF CAPACITY

Senator **Levin**. Admiral Martini, are all the above facilities currently operating at full capacity?

Admiral **Martini**. No, current funding and personnel limitations permit utilization of less than full production capacity.

INCREASED MANPOWER

Senator **Levin**. Admiral Martini, with increases in civilian manpower, could the capacity of the six individual naval air rework facilities be increased?

Admiral **Martini**. Yes. Since the facilities are currently operating below full production capacity, we could reduce rework backlogs if additional funding and manpower became available.

NARF REQUIREMENT

Senator **Levin**. Admiral Martini, are all six naval air rework facilities needed to meet the Navy's aviation depot maintenance requirements?

Admiral **Martini**. Yes, all six facilities are needed to meet the Navy's requirements for aviation depot maintenance.

CONSUMABLE ITEM TRANSFER TO DLA

Senator **Levin**. What is the Navy's position on the proposed transfer of consumable item management from the individual services to the Defense Logistics Agency?

Answer. Navy policy on the issue of realignment of item management responsibilities to the Defense Logistics Agency (DLA) was stated in the Under Secretary of the Navy's memorandum for the Assistant Secretary of Defense (Manpower, Reserve Affair & Logistics) dated 21 May 1981, and I quote, "The Navy Department has not opposed the transfer of non-weapon system critical consumables to DLA in accordance with DoD item management coding criteria. The Navy Department has applied those criteria judiciously and has not confused 'weapon system applicable' with 'weapon system critical.' For example, past Navy transfers to DLA have included 78,300 items which comprise approximately 55 percent of the consumables in two essential Navy programs, the Polaris/Poseidon/Trident weapon systems and nuclear propulsion. Only items considered critical to these vital weapon systems were retained . . . to permit close and continuous Navy Inventory Control Point (ICP) liaison with Navy program managers, hardware systems commands, design control agents, quality assurance activities, and Fleet representatives. The Navy has recognized this critical need by not only retaining their management in the past but by also establishing special inventory management organizations within Navy ICPs to manage all 'weapon system critical' items in these categories: Polaris/Poseidon/Trident weapon systems, nuclear propulsion, SUBSAFE/Level I, and catapult and arresting gear items. Field level repairables and special management consumables retained by the Navy and Marine Corps receive equal specialized organic attention and require the same intense coordination and management based on program liaison on a frequent basis between the ICPs and the Fleet, Fleet Marine Force, or the program manager. Navy program managers responsible for strategic programs such as Polaris/Poseidon/Trident and nuclear propulsion have been unanimous and emphatic about the need for Navy ICP retention of the weapon system critical items for continuing successful management of these programs."

Senator **Levin**. What type of items will the Navy be transferring to the DLA under the initial 200,000 item transfer currently in progress?

Answer. The Navy will transfer approximately 71,000 items with a representative mix of aviation and shipboard applications. They will consist of material ranging from common hardware and electronic parts to aircraft engine components.

Senator **Levin**. What will be the impact on Navy material readiness, if any, of this proposed transfer?

Answer. We expect improved fleet readiness as a result of additional resources DLA will assign to the items transferred.

Senator **Humphrey**. The subcommittee will stand adjourned. Thank you.

[Whereupon, at 11:25 a.m., the subcommittee was adjourned, subject to call of the Chair.]

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 9, 1982

U.S. Senate,
Subcommittee on Preparedness,
Committee on Armed Services,
Washington, D.C.

AIR FORCE FACILITY AND DEPOT MAINTENANCE PROGRAMS

The subcommittee met, in open session, pursuant to notice, at 10 a.m., in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Staff present: Michael B. Donley, David S. Lyles, and José E. Martinez, professional staff members; and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator Humphrey. Good morning. The subcommittee meets today to receive testimony on the Air Force facility and depot maintenance programs for fiscal year 1983. We are pleased to have with us Maj. Gen. William Gilbert, Director of Engineering and Services, and Brig. Gen. William Bowden, Deputy Director for Logistics Plans and Programs.

The purpose of today's hearing is to provide the opportunity for a more detailed discussion of two large and important O. & M. programs.

With regard to real property maintenance the Air Force has a reputation for well-kept installations and facilities. But while the Air Force is perceived to have a smaller problem than the Army, the old age of our real property assets represents a challenge to all Services. Because the Air Force will fight and sustain itself from current operating bases, the subcommittee is particularly interested in making sure that priorities are directed toward facility maintenance projects with the most direct impact on readiness.

Concerning the depot maintenance program, the subcommittee seeks a better understanding of the problems and constraints associated with managing the depot maintenance workload.

In addition, the subcommittee needs a more complete understanding of how depot maintenance programs are financed and accounted for within the total Air Force budget.

Finally, we will want to know how changes and trends in the force structure will affect depot maintenance demand and costs.

We will begin by addressing the facility maintenance program with Major General Gilbert.

STATEMENT OF MAJ. GEN. WILLIAM D. GILBERT, DIRECTOR, ENGINEERING AND SERVICES, USAF, ACCOMPANIED BY BRIG. GEN. DANIEL B. GERAN, DEPUTY DIRECTOR OF BUDGET (OPERATIONS), COMPTROLLER OF THE AIR FORCE; AND COL. JOSEPH A. AHEARN, CHIEF, PROGRAMS DIVISION, USAF

General **Gilbert**. Good morning. The Air Force is pleased to be here this morning to discuss its Air Force physical plant with the committee, and if I could, I would summarize my statement and file the full statement for the record.

Senator **Humphrey**. That is all right.

General **Gilbert**. The physical plant consists of about 2,996 installations including 133 major ones. There are 106 major installations in the United States and its possessions, and another 27 major installations located overseas.

The acquisition value of the plant is just over $18 billion, but to replace it at today's prices would be about $96 billion. The average age of our plant is between 25 and 30 years old and as a matter of fact 51 percent of the Air Force's are about 25 years old. The majority of them was acquired during World War II as well as during the Korean conflict.

However, during the 1980's, the Air Force is dedicated to facility modernization of our bases as evidenced by the budget now before the Congress for consideration in 1983.

The Air Force, I believe, is unique and the chairman mentioned this in his opening statement, among the military services because we must be prepared to fly and fight from our platforms which are indeed our bases. Our installations are the launch and recovery platforms from which we carry out our peacetime training as well as our wartime missions.

Therefore, the condition of our facilities directly contributes to the Air Force's readiness and sustainability. Facilities such as runways, taxiways, aircraft shelters, missile silos and launch control centers and maintenance hangars, shops, and so forth must be as ready to function during hostilities as are our personnel and weapons systems.

Utility systems, communication facilities, data processing facilities, and munition storage facilities—and even warehouses—must not only exist when and where they are needed, but they must be in good condition fully capable of serving the intended function.

Now, so far as our BMAR is concerned, it has steadily grown since 1975. This occurred because the O. & M. appropriation in general and the real property maintenance activities program in particular were underfunded. Our physical plant indeed deteriorated and higher than budgeted inflation eroded the O. & M. buying power we had.

The preponderance of our annual funding goes for must-pay items such as utilities, supplies, personnel payrolls and other services such as fire protection, refuse collection, and custodial services.

The BMAR is not a precise measure of the total maintenance and repair requirement. Rather it measures those essential requirements previously identified and validated, which were deferred due to lack of resources.

Each fiscal year we also generate newly identified maintenance and repair requirements, thus our total requirement in any fiscal year includes previously deferred BMAR plus the new requirements for the current year.

To show this I have a specific example, pertinent to our current budget projections, that demonstrates how uncertainties about funding can impact the accuracy of our BMAR estimates. The current estimate for 1982 funding includes a $75 million supplemental appropriation request.

Should that supplemental request not be supported, then our end fiscal year 1982 BMAR estimate will increase from $307 million to $382 million. Similarly carrying forward or bow-waving into fiscal year 1983, such an increase in deferred requirements would increase the total maintenance and repair requirement for that year.

The funding included in our fiscal year 1983 budget request would then not be adequate to reduce the BMAR according to the current estimate. Rather than $188 million BMAR at the end of fiscal year 1983 we would estimate a $270 million BMAR.

A final observation, it just makes good sense to control the Air Force's BMAR. As mentioned earlier, the replacement value of our physical plant is about $96 billion, and the average age is now between 25 and 30 years old. In the next decade many of our facilities will approach the end of their economic life unless they are adequately maintained, repaired, modernized or replaced.

Therefore, we must act now to improve the level of maintenance and repair on those facilities in order to extend their useful life.

I conclude by recognizing that our fiscal year 1983 O. & M. funding is reduced somewhat from the fiscal year 1982 level. Still, relative to the extremely austere late seventies, it provides a significant improvement in our capability to maintain and repair the physical plant.

I firmly believe that the level of funding in our budget request will enable us to remain on track toward achieving our real property maintenance and BMAR objectives.

I also believe our efforts to improve facility conditions will directly contribute to readiness, morale, productivity, and personnel retention in the Air Force, and we would ask Congress' support in helping us attain this worthy goal.

Sir, that concludes the summary of my statement. And now I am ready to respond to any questions the committee might have.

[The prepared statement of Maj. Gen. William D. Gilbert follows:]

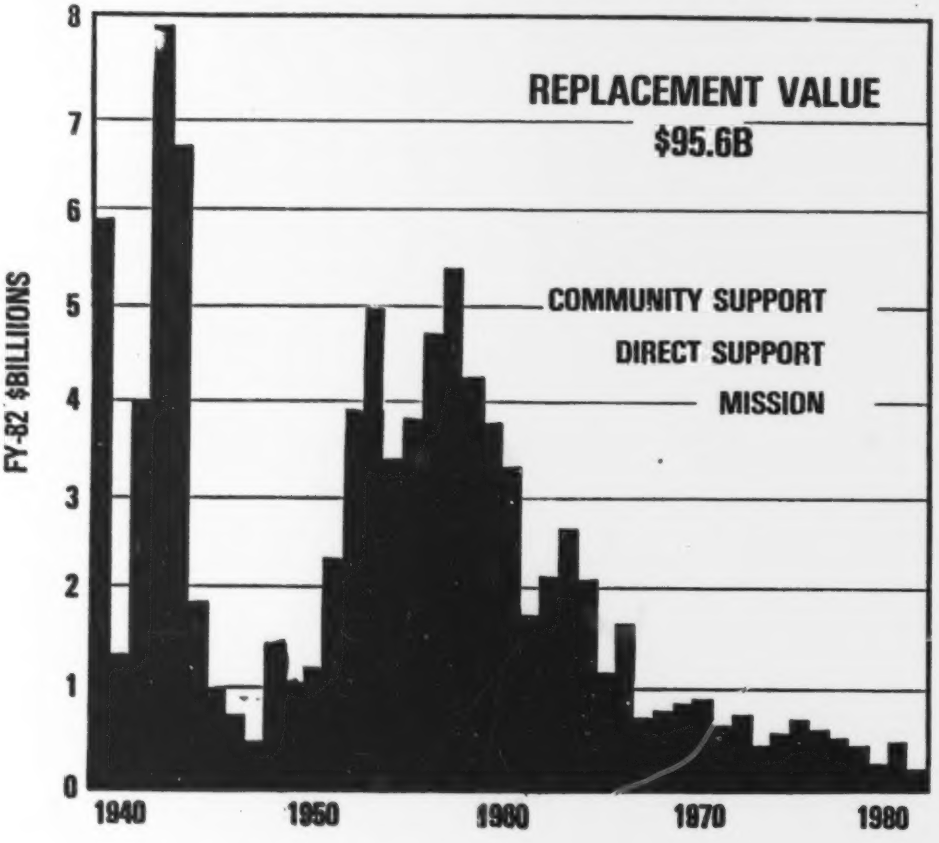
PREPARED STATEMENT OF MAJ. GEN. WILLIAM D. GILBERT, DIRECTOR, ENGINEERING AND SERVICES

Mr. Chairman and members of the committee: I welcome this opportunity to meet with you and discuss the Air Force's physical plant—its size and age, relation to the mission, condition, and problems associated with its current conditions. The primary indicator we use to assess the condition of our facilities is the backlog of maintenance and repair for real property—BMAR as we commonly refer to the backlog. The fiscal year 1983 O. & M. funding requested for real property maintenance will enable us to further reduce the BMAR—an effort begun in fiscal year 1982. Our interest in the BMAR is significant because, as we see it, the current backlog impedes our efforts to improve the readiness, sustainability, and morale of the Air Force as well as to preserve our investment in the physical plant.

THE AIR FORCE PHYSICAL PLANT

The Air Force physical plant consists of 2,996 installations including 133 major ones. There are 106 major installations in the United States and possessions. There are 27 major installations located overseas. Acquisition value of the plant is just over $18 billion—but to replace today's physical plant (excluding land) would require nearly $96 billion. The average age of our physical plant is between 25 and 30 years old. The majority of our facilities are of World War II or Korean War vintage as shown in the accompanying figure on the age profile.

PHYSICAL PLANT AGE PROFILE



Our aggregate assets include:

- 501 million square feet of building space
- 250 million square yards of airfield pavements
- 12,000 miles of roads and streets
- 146,000 military family housing units
- 10.8 million acres of land

BEST DOCUMENT AVAILABLE

During the 1980's, the Air Force is dedicated to facility modernization on our bases. This program is aimed at attracting and retaining our people to make them more productive members of the fighting force. For fiscal year 1983 the Air Force is requesting $2.24 billion for the O. & M. real property maintenance activities program, $2.08 billion for the military construction program, and $936 million for the military family housing program.

The Air Force is unique among the military services because we must be prepared to fly and fight from the bases we operate. Our installations are the launch and recovery platforms from which we carry out our peacetime training and wartime missions. Since 1960, we have reduced the base structure by 47 percent (from 254 to 133 major installations). Over 100 bases were closed between 1960 and 1972. Since 1972, we have closed 14 bases as we fine-tuned the base structure into a streamlined, efficient and responsive foundation.

The condition of our facilities directly contributes to the Air Force's readiness and sustainability. Facilities such as runways, taxiways, aircraft shelters, missile silos and launch control centers, and maintenance hangars/shops must be as ready to function during hostilities as are our personnel and weapon systems. Utility systems, communications facilities, data processing facilities, munitions storage facilities and even warehouses must not only exist when and where they are needed but they must be in good condition, fully capable of serving the intended function. Facilities to support our people, such as medical facilities, troop housing, dining halls, and community/recreational facilities, must be available to provide for basic needs—and they too must be in good condition to contribute to the morale, welfare and, ultimately, the retention of our personnel.

CONDITION OF THE PHYSICAL PLANT

With regard to the condition of our physical plant and the BMAR, there are several points I would like to share with you today.

First, our BMAR has grown steadily since fiscal year 1975. This occurred because the O. & M. appropriation in general and the real property maintenance activities program in particular were underfunded, our physical plant deteriorated, and higher than budgeted inflation eroded our O. & M. buying power. The preponderance of our annual funding goes for "must pay" items such as utilities, supplies, personnel payrolls, and other services such as fire protection, refuse collection and custodial services.

That portion of our budget which is somewhat flexible—maintenance and repair by contract—consequently felt the greatest impact of underfunding in past years. For example, reductions in the Air Force O. & M. appropriation—from whatever source and for whatever reason—without a corresponding specific workload reduction, translate into funding reductions absorbed by the flexible, or discretionary, portion of the O. & M. budget. All too often, we have had to defer upkeep of our facilities because of such reductions. These deferrals contribute directly to an increase in the BMAR. It is in this climate that underfunding of maintenance and repair contract work has occurred. The result is a large BMAR "bow-wave" that requires several consecutive years of increased funding to restore our facilities and reduce the BMAR to manageable level. We believe that fiscal year 1982 will reverse the trend of a growing BMAR. Our fiscal year 1983 O. & M. budget request enables us to continue reducing the BMAR in line with our overall program objectives.

Second, the BMAR is not a precise measurement of the total maintenance and repair requirement. Rather it measures those essential requirements, previously identified and validated, which were deferred due to a lack of resources. Each fiscal year we also generate newly identified maintenance and repair requirements. Thus our total requirement in any fiscal year includes previously deferred BMAR plus new requirements. Our success in achieving real property maintenance/BMAR goals set forth in our budget request is highly dependent on the accurate projection of total requirements versus available funding.

Several factors can impact that accuracy. For example, if we experience a higher than budgeted inflation rate, we have a shortfall of funding to match against total requirements, i.e., our O. & M. dollars lose purchasing power. Also, reductions in the O. & M. appropriations without corresponding workload reductions can translate into funding shortfalls for real property maintenance and repair. Finally, if the identification, or generation, of new requirements during budget execution exceeds our projections, we also experience a shortfall of funding against total requirements. Such new requirements then become deferred at the close of the fiscal year and are subsequently added to the BMAR. I have a specific example, pertinent to our current budget projections, that demonstrates how uncertainties about funding can impact the accuracy of our BMAR estimates. The current estimate of fiscal year 1982 funding includes a $75 million supplemental appropriation request.

Should that supplemental request not be approved, then our end of fiscal year 1982 BMAR estimate will increase from $307 million to $382 million. Similarly, carrying forward or "Bow-waving", into fiscal year 1983 such an increase in deferred requirements would increase the total maintenance and repair requirement for that year. The funding included in our fiscal year 1983 budget request would then not be adequate to reduce the BMAR according to our current estimate. Rather than a $188 million BMAR at the end of fiscal year 1983 we would estimate a $270 million BMAR.

A final observation—it just makes good business sense to control the BMAR. As mentioned earlier, the replacement value of our physical plant is about $96 billion and the average age is now between 25 and 30 years old. In the next decade, many of our facilities will approach the end of their economic life unless they are adequately maintained, repaired, modernized, or replaced. Military construction funding has been increased in fiscal year 1983 to begin addressing the major modernization and replacement effort needed. Nevertheless, we still foresee the continued use and upkeep of many older, marginally effective facilities. We must act now to improve the level of maintenance and repair on those facilities in order to extend their useful life. Private industry clearly recognizes the need to maintain and modernize their aging facilities. They do it to stay efficient and remain competitive. Considering the stake in our business is national defense, it is logical that we also should properly maintain and modernize our large physical plant.

CONCLUSION

I conclude by recognizing that our fiscal year 1983 O. & M. funding is reduced somewhat from the fiscal year 1982 level. Still, relative to the extremely austere late 1970s, it provides a significant improvement in our capability to maintain and repair the physical plant. I firmly believe the level of funding in our budget request will enable us to remain on track toward achieving our real property maintenance/BMAR objectives. I also believe our effort to improve facility conditions will directly contribute to improved readiness, morale, productivity, and personnel retention in the Air Force.

Congressional support for real property maintenance has been outstanding. As a result, we have been able to focus attention on the deterioration of our physical plant and its impact on the air Force mission and personnel. We very much appreciate that support. With your continued interest and support we will sustain our effort to improve the Air Force physical plant. Thank you.

Senator HUMPHREY. All right. Do you want to introduce your staff?

General GILBERT. On my left is General Geran, the Deputy Director of the Budget and on my right is Colonel Ahearn, Brigadier General Selectee, the Chief of my Programs Division.

Senator HUMPHREY. I hope he doesn't make any mistakes this morning.

General GILBERT. Yes, sir.

Senator HUMPHREY. He is kind of in a vulnerable spot.

Well, let us see. O. & M. funding is decreasing. What are the 1982 and 1983 figures?

General GILBERT. In the current estimate for 1982, our program was $419.2 million, that is for facility projects by contract, sir, the amount of money that reduces the BMAR.

In fiscal year 1983 it is $392.2 million.

Senator HUMPHREY. This is the account within O. & M. that reduces BMAR?

General GILBERT. That is correct, sir.

Now, Mr. Chairman, I would add to that 1982 figure with a supplemental of $75 million. That would increase to $494 million.

Senator HUMPHREY. With the supplemental it is $494 million?

General GILBERT. Yes, that is 1982, sir.

Senator **Humphrey**. You add the supplemental, which applies to 1982, and that makes the 1982 figure $494 million versus $392 million for 1983?

General **Gilbert**. Yes, which we would of course spend out in fiscal year 1983.

Senator **Humphrey**. I understand.

What accounts for this supplemental? Is that inflation?

General **Gilbert**. No, sir, I believe it is recognition on the part of DOD and the Air Force that indeed we do need additional funds in fiscal year 1982 to apply to the reduction of BMAR and the importance of facilities to the Air Force's mission.

Senator **Humphrey**. Recognition is about a year late. Why wasn't that recognized a year ago when we were preparing the 1982 budget?

General **Gilbert**. I think it was recognized. As a matter of fact, I am confident it was recognized, but I believe that at the time OSD of course had pushed up against the President's figure for the fiscal year 1982 budget and then got some relief later and that is when they came forward with the supplemental.

Senator **Humphrey**. I certainly don't begrudge, and in fact I urge, the reducing of these backlogs, but I must say it disturbs me the way it is approached. We have enough difficulty with the budget process without people deliberately underestimating their needs and coming back later for a supplemental.

I can understand it in the case of relative items, inflation, and unanticipated increases in expense, but to reserve a second bit deliberately I think is ultimately going to get us in trouble.

I know that is not strictly your responsibility, but I want to express that sentiment.

What is the actual dollar figure of the backlog of maintenance of BMAR at this point?

General **Gilbert**. It is $530 million at the end of fiscal year 1981, Mr. Chairman.

Senator **Humphrey**. The total backlog is $530 million at the end of 1981?

General **Gilbert**. Yes.

Senator **Humphrey**. And in 1982 you were planning to apply $419 million to that?

General **Gilbert**. That is correct, sir. That would be the backlog plus the new requirements identified for accomplishment in fiscal year 1982.

Senator **Humphrey**. Plus those accruing in 1982?

General **Gilbert**. Yes.

Senator **Humphrey**. How much of the $419 million was intended to reduce the backlog?

General **Gilbert**. About 75 percent of that because our total requirement for fiscal year 1982 is estimated at $801 million and we would apply then against the total $419 million, appropriated in fiscal year 1982.

Senator **Humphrey**. Let us approach it from this angle. Give me the comparative figures that go along with the 1981 figure of $530 million. What is it supposed to be at the end of 1982 and 1983 and 1984, et cetera?

General GILBERT. Well OK, 1982 we project we will reduce our BMAR down to $307 million, with the supplemental. And with that supplemental and the 1983 request now before the committee of $392.2 million we would reduce the total backlog down to $188 million. And in further projecting our 1984 program, as we see it now, would reduce it to what we consider a manageable level or about 6 months' backlog which we do need for planning purposes, of about $100 million, Mr. Chairman.

Senator HUMPHREY. Is there a congressional containment level in this?

General GILBERT. Yes sir, there was, there was a congressional containment level established about 3 years ago such that the Air Force should not let its BMAR go beyond $300 million, and that is what it was then.

Senator HUMPHREY. And beyond the congressional guidance in that regard, what guidance has been provided by OSD in the 5-year defense plan?

General GILBERT. Their objective has been in each of the fiscal years, to get it down to a manageable level and because of funding constraints of course we are just now being able to reach that manageable level which we in the Air Force believe to be about $100 million.

Senator HUMPHREY. What management tools do you use to insure that these funds are directed toward the highest priority projects?

General GILBERT. Our requirements are initiated at base level, where our in-house engineers look at facilities on their base and determine the maintenance and repair that must be done in their engineering judgment during the current year as well as future years.

Then they further decide whether we need to do that or must do that by contract or in-house forces. The in-house force effort is a level of effort as I am sure you know, so the remainder then of the maintenance and repair is planned for contract.

Then each of our bases submit their requirements for the current year, including any bow-wave as far as previous years identified but not accomplished BMAR, to the major commands. The major commands consolidate that into their budget request to come during this time of each year, during the POM cycle, for consideration by the Air Force leadership which considers it in the programed budget deliberations.

There is a specific tracking system for projects identified not only for accomplishment in the current year, but also that is work that was identified for previous years, but not accomplished.

Senator HUMPHREY. Are you confident that the highest priority projects are receiving the first consideration?

General GILBERT. Yes, sir, I am. I suppose that one might find in their judgment exceptions to that. But I believe that our engineers are conscientiously making their surveys annually to determine that, and then the approval authorities at base, major command and Air Force level, are approving funds against those requirements and the funds that are available then are applied against those requirements.

Senator **Humphrey**. How much of this backlog is CONUS and how much is overseas, do you have a breakdown?

General **Gilbert**. Yes, sir, I do. For overseas, the backlog is $114 million, primarily. Europe and PACAF, and the remainder of the $530 million would be in the CONUS, or belong to CONUS commands, Mr. Chairman.

Senator **Humphrey**. OK. I was in Germany over the Christmas recess and I had an opportunity to visit Air Force facilities. However, I spent most of my time with the Army, where facilities are in deplorable condition. The Air Force facilities appear to be in somewhat better condition, but in view of the morale problems, because of other problems, are you giving any special emphasis to your facilities in Germany, particularly living and working conditions?

General **Gilbert**. I would provide my assessment of that, and then ask the Deputy Director of the Budget here to comment if he will, Mr. Chairman.

For the last 2 years I believe so. Prior to that it was known that USAFE was severely underfunded in this area. But I do believe now that their funding is at a level that will help them, along with the rest of the Air Force, reduce their backlog by the end of 1984.

General **Geran**. I was over at USAFE and I came back just last summer so I have some familiarity with that area. We had serious problems over there in 1979 and 1980, and the end of 1980 we had a supplemental request that added money to the program. It was late in the year, and most of those dollars or a good portion of it was devoted to facility projection. That helped Europe immensely, that late-year 1980 money.

Although 1981 was a good year for Europe and I think as General Gilbert remarked, 1982 and 1983 look like reasonable years. I think along with the rest of the Air Force they are moving toward a substantial reduction of the BMAR.

I might add they have an MCP problem in that or some programs we just could not get approved as far as added construction. We need some collocated operating base support and those facilities haven't received approval. BMAR and other projects are getting well in hand.

Senator **Humphrey**. What is MCP, is that construction?

General **Geran**. Yes; construction money.

Senator **Humphrey**. We have acronyms that apply to the same thing and that gets confusing.

You say that the Air Force European projects are moving along with the rest of the Air Force. Are you giving them more priority or what?

General **Geran**. At least from the budget standpoint we gave Europe more priority in 1979 and 1980 and also in 1981 and 1982. We have given them a little bit more priority, trying to balance the program and taking into account the high inflation. The inflation rate is greater than CONUS, and we try to accommodate that. I think that is reflective and I think General Gilbert will agree to that.

General **Gilbert**. Yes.

Senator **Humphrey**. General Gilbert, did you have any input in arriving at the $392 million figure?

General GILBERT. The budget request, you mean, Mr. Chairman?

Senator HUMPHREY. Yes.

General GILBERT. Yes, sir, I did.

Senator HUMPHREY. How much did you ask for?

General GILBERT. Our going-in request asked for a match of our requirement which would have been about $580 million.

Senator HUMPHREY. You asked for $580 million and you got $392 million?

General GILBERT. Yes.

Senator HUMPHREY. Do you recall what you asked for in 1982?

General GILBERT. Well, again I can say that every year I ask for the requirement and I believe in doing that, and so that would have been about $801 million and we have $494 million so far with the supplemental that is now over in the Congress.

O. & M. ACCOUNTS SHRINKING

Senator HUMPHREY. As you may know, there are some in Congress who charge that O. & M. accounts are shrinking because of inordinate emphasis on procurement. Your O. & M. account is shrinking. How would you respond to that criticism?

General GILBERT. Well, now I would have to respond to that in a positive way, that in our case, and we are just one element of the O. & M. account, ours is funded very well in recognition of the facility requirement in the Air Force, and I have a commitment from the leadership of Air Force to buy this BMAR out to a manageable level by 1984, so I feel that we have been able to justify our requirements and justify them very well and that there has been a total supportive recognition to that, Mr. Chairman.

Senator HUMPHREY. I am sure historically you have never gotten what you have asked for, and apparently the procedure is to ask for the full backlog and historically you never get it or you wouldn't have an increase in backlog?

General GILBERT. No, sir, and as a matter of fact, I would like to commend the Congress for adding money on a couple of occasions during recent years that has helped us to contain it at the level we have it now, but I think as evidenced by the 1982 request on the part of the Air Force and the 1983 request and what I am looking forward to and I have no reason to doubt that I will be supported. We, the Air Force, now are determined to reduce the backlog.

Senator HUMPHREY. I don't understand the chart on page 2 of your testimony.

General GILBERT. What that is merely reflecting, Mr. Chairman, is that it is time that we got after BMAR because it shows that 50 percent of our facilities are in the 25-year age group. You see, they came online in the midfifties to the midsixties and now they are reaching the point to where if facilities are not updated and modernized, certain systems associated with the facilities then deteriorate at a very rapid rate and that is the purpose of that chart, to show this tremendous number of facilities that are right now in that condition and if we don't do that in another 15 years the rate of deterioration will be so rapid we will be looking at everything to replace many of those.

Conversely, with proper funding in the BMAR account we will be able to modernize those, and update them, and extend their life by another 30 or 40 years.

Senator HUMPHREY. I see. So that is the value of Milcon in those years, is that right?

Colonel AHEARN. That is the replacement value in the existing inventory.

Senator HUMPHREY. The cost to replace them?

Colonel AHEARN. Yes.

Senator HUMPHREY. And I think the chart would be ascending rather than descending.

General GILBERT. Well, the primary focus of that is to show facility groupings by age. You see what it reflects is that we have not been so well funded in the military construction side of the program, which directly impacts the RPMA in recent years. So we have not been able to modernize through replacement.

Senator HUMPHREY. I don't want to beat a dead horse, but I would like to understand this better. The kickback in the late fifties, in 1959 maybe, it was about $5.4 billion, in 1982 dollars, is that right?

General GILBERT. Yes.

Senator HUMPHREY. What does that dollar figure represent?

General GILBERT. That is the dollar figure of the facilities, if you will recall in my statement I stated that most of our facilities were acquired in World War II and the Korean conflict and that is really merely reflecting the majority of those facilities, appropriated, funded, and built during those two periods.

That now means that they are getting to be 25 years old, so our BMAR or our maintenance requirement is growing because of reaching that time.

Senator HUMPHREY. I understand all of that, but I am trying to understand what you are expressing in that chart.

Colonel AHEARN. Let me try, if I may.

The inventory of buildings built in that year, 1957 or 1958 there, the inventory of those buildings built, existing today, the replacement value of those is at about $5.3 billion. You have an existing inventory, and——

Senator HUMPHREY. OK; to replace the buildings built in that peak year, I guess.

General GILBERT. To show it is very economical for us to spend the maintenance money to extend their life rather than let them deteriorate and replace them.

Senator HUMPHREY. I have one last question.

Was there any money reprogramed out of real property maintenance for other purposes in 1980 or 1981?

General GILBERT. At the beginning of the year there probably was because commanders use their O. & M. funds to keep the whole Air Force going, but by the end of the fiscal year, no, sir, through migration back to our account or reprograming back to our account we got all of the moneys that were programed to go into real property maintenance for those fiscal years.

Senator HUMPHREY. So that the practice is to borrow between accounts, but before the end of the year you are made whole, is that what you are saying?

General GILBERT. Yes.

General GERAN. Let me add to that, what you get into is execution and the execution of the programs is a long way from the development of the budget which you originally submitted to the Congress to get it approved.

See, we have a lot of unfunded requirements and a lot of things arise during that time we have to cover. So you will start out the year, 1980 is a prime example, and we had a poor funding year in 1980, as we started out that year.

In Europe, for example, we laid on a program at the beginning of 1980, of about $2½ million for all of the facility project requirements in Europe, and that account normally runs between $35 and $40 million and last year it was up to $55 or $60 million. To show you the difference we start out with a $2½ million program because we didn't have the money to do the training that we needed to do, and we put our emphasis in those areas and we cut things like facility projects. We cut things like people programs, to fund that area of training that we needed to accomplish.

We then got a late-year supplemental and that money was added to the program and we used that money then to cover some of the facility projects we had. Our program ended up in Europe again at about $30 million.

Senator HUMPHREY. Are you saying that when these funds return you don't always have projects on the shelf ready to go?

General GERAN. No, I am saying now we have projects at every command, we have projects on the shelf that can be funded. Dependent on the command and particularly during the bad years, some of the commands didn't pursue design capability primarily because they thought they would never get funds to use the designs. And so why waste money on the designs.

That is changed. Every command now has projects on the shelf waiting for late-year money to come, so if we get a late-year supplemental that money can be sent out to the command and they can obligate it right away.

General GILBERT. I think that is why this account is borrowed from at the beginning of the fiscal year, because we can put the designs on the shelf.

Senator HUMPHREY. I keep thinking of last year here. In putting together and in submitting the 1983 budget request are you anticipating a 1983 supplemental as well, or are you planning to submit a supplemental?

General GILBERT. I would defer to the budget folks.

General GERAN. Not at the present time. We have no intention of submitting a supplemental now. I am not sure what will happen in the future.

Senator HUMPHREY. Well, I am still mystified how it happens that we are getting this 1982 BMAR supplemental if at the outset in submitting the 1982 budget, and assuming last year it was the same way, it is as you just told me, at the outset it wasn't anticipated to submit a supplemental. How do we end up getting a supplemental on something that is fairly controllable? There aren't too many surprises in BMAR, maybe inflation, but how do you explain that?

General **Geran**. I have to duck it a little bit. General Gilbert did about as well with that one as I can. I think what happened, we worked toward an overall bogey for DOD and we went through several interactions this year putting the 1982 program together.

We first started out with a program and that got into the budget and that was a program slightly less than the target I think that OMB passed out to DOD as an outlay target. When it came down we added a dollar amount that reached the OMB targeted amount and we got some more outlay. I am not sure of that and I would have to couch that that is my view and certainly it doesn't represent the Department or OSD.

Senator **Humphrey**. Did the Air Force ask for this supplemental or was it assigned to it?

General **Geran**. They came back to the Air Force and said, and by the by, OSD came back to the Air Force and said if we submit a supplemental for 1982, what do you want to request?

We put in, in the O. & M. account, several things, including unemployment compensation, Public Health Service hospital claims, and we must pay items that came in.

We submitted those and they were generally acknowledged and we had some other categories, too. OSD changed some of those and added RPMA. We ended up with a supplemental amount of $103 million in 1982 for the Air Force. So it was sort of a give-and-take.

Senator **Humphrey**. I realize that was a policy decision in OSD, so maybe I am barking up the wrong tree, but I think this further undermines the budget process and in particular undermines the credibility of the DOD submission.

To whatever extent you can share that with your superiors, I think it would be useful because in the long run this kind of procedure is going to work against what you and I want to do.

General **Geran**. We will carry that back. I am inclined to think that a supplemental ought to be used for those must pay kind of things. RPM is probably one of the things that should be accomplished in the budget cycle itself.

Senator **Humphrey**. Very good. Thank you. Thank you for your testimony and we will go on to a second panel.

You may introduce your staff and then proceed as you wish.

STATEMENT OF BRIG. GEN. WILLIAM P. BOWDEN, DEPUTY DIRECTOR, LOGISTICS PLANS AND PROGRAMS, HEADQUARTERS, USAF, ACCOMPANIED BY BRIG. GEN. DANIEL B. GERAN, DEPUTY DIRECTOR OF BUDGET (OPERATIONS), COMPTROLLER OF THE AIR FORCE; CHARLES D. McELHANON, CHIEF, MODIFICATION/O. & M. PROGRAMS DIVISION, DIRECTORATE OF LOGISTICS PLANS AND PROGRAMS; MAJ. LYNTON C. DUDLEY, CHIEF, CONGRESSIONAL ENACTMENT, DIRECTORATE OF MANPOWER AND ORGANIZATION; MAJ. STEVEN R. ERICKSON, DEPOT MAINTENANCE POLICY, MAINTENANCE POLICY DIVISION, DIRECTORATE OF MAINTENANCE AND SUPPLY; AND MAJ. RAYMOND T. HOLMES, CHIEF, DEPOT MAINTENANCE PROGRAMS, MODIFICATION/O. & M. PROGRAMS DIVISION, DIRECTORATE OF LOGISTICS PLANS AND PROGRAMS

General **Bowden**. Sir, we have with us General Geran, who will continue to assist us in this hearing; Mr. Charles McElhanon, who is with our Logistics Plans and Programs; Maj. Steven Erickson, who is from our Maintenance Policy Organization; Maj. Ray Holmes in Plans and Programs; and Major Dudley from Manpower.

I am very pleased to present the Air Force depot maintenance program. I have a detailed statement that I would request permission to submit for the record. I have a few brief summary remarks and also included in these summary remarks I have some photos that outline some of the things that we do in our organic logistics system.

DEPOT MAINTENANCE

Sir, the Air Force depot maintenance program involves overhaul, repair, modifications of all of our weapons systems and we are talking about aircraft, engines, missiles, and a substantial part of our workload is the repair of spare parts.

We have essentially three kinds of depot maintenance. We have organic programs which we now do in given logistics centers and one specialized repair activity and those are the photos that I will be showing you.

We also have a substantial contract depot program and the third one is an inter-service type of arrangement.

We have had some significant policy changes in the last decade that certainly contributed to our productivity enhancement. One of them deals with the way that we carry out our maintenance on our aircraft and our engines. We call it reliability-centered maintenance where we are looking at what tasks we need to do to keep the airplanes and engines reliable and safe.

We answered a question in reliability-centered maintenance, where should we accomplish this maintenance either in the field or in the depot, and certainly it has made a good contribution to our depot program. It saved us some money and reduced the trips that airplanes and engines make to the depot. In some cases it reduced the work approximately 25 percent.

Another policy change that we have had over the last several years, most recently we started the program called technical repair center realignment in the 1974 and 1976 time frame. In that program we consolidated simular work into essentially one location, putting, for instance, the landing gear overhaul at one place, like at Ogden Logistics Center.

So briefly those are the opening comments that I wanted to make and with your permission I would like to show you a few photos of what we do.

Senator **Humphrey**. All right, will you proceed.

General **Bowden**. I might say, sir, that we have in the Air Force three levels of maintenance. Of course the depot maintenance is the program that we are addressing today.

WHAT "DEPOT MAINTENANCE" IS

- Maintenance Beyond Capability of Operating Commands
- Repair, Overhaul, Modification
- Unique Skills, Facilities, Equipment

Two of the other levels occur at the base, the first one is our organizational level maintenance, that is the maintenance that we do on the flight line, and the crew chief's work and the work that we are doing in the fuel cell repair and those kinds of things.

The second level of maintenance that we do at the base is the intermediate level, that is the back shop work, the work we do on the black boxes, in the bomb navigation shops, and those kinds of activities.

I think the key word we need to focus on in the depot maintenance program that is the work we must do that is beyond the capability of those first two levels of maintenance that I talked about on the base.

MAGNITUDES

- Organic
    - 36,000 people
    - $3.5 billion plant and equipment replacement value
    - $1.9 billion program fiscal year 1982
    - ALC largest facility in State, region
- Contract
    - $1.4 billion fiscal year 1982
    - 1,500 plus active contracts
    - 500 plus contractors
    - 43 States
    - 7 foreign countries.

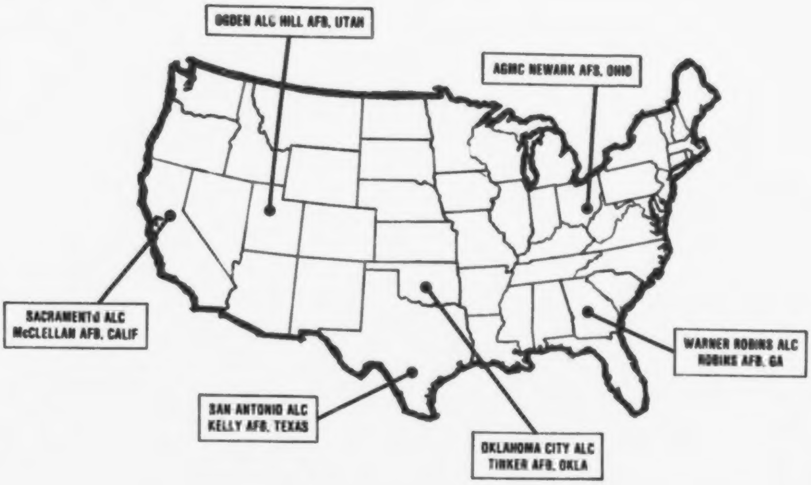
This is the magnitude of the scope of the program, the organic, and then the contract program. You see we have 36,000 people involved in our Air Logistics Centers and special activity work.

In the contract program you can see that we have a number of contracts, a wide variety of contractors, large and small. We are talking about KC-135 program depot maintenance, done in places like Hayes Corporation in Birmingham, Alabama, doing some small business work on our hydraulic systems in towns like Lamar, Kansas.

We have some contract depot work accomplished overseas and that is for shorter turnaround times of the parts and work to make sure that our readiness state is kept in the highest state possible.

ORGANIC
INDUSTRIAL FACILITIES

DCS/Logistics & Engineering


OGDEN ALC HILL AFB, UTAH
AGMC NEWARK AFS, OHIO
SACRAMENTO ALC McCLELLAN AFB, CALIF
WARNER ROBINS ALC ROBINS AFB, GA
SAN ANTONIO ALC KELLY AFB, TEXAS
OKLAHOMA CITY ALC TINKER AFB, OKLA

AIR LOGISTICS CENTERS

This is the layout of the Air Logistics Centers. We have five centers now, and one specialized repair activity at Newark, Ohio, that is involved in inertial guidance system repair and Minuteman system and aircraft inertial guidance systems.

Over the last 25 years we have streamlined our air logistics center program. In 1954, for example, we had 21 major depots around the world. And in 1965 we had reduced that to nine and today we have this posture. It is brought about by the declining quantities of aircraft and also taking advantage of transportation networks and management information systems that we have established in our depot programs.

I have some slides that walk you around and give you a bird's-eye view of some of the activities.

[Slide deleted.]

BEST DOCUMENT AVAILABLE

MINUTEMAN SYSTEM

First the inertial guidance system repair that goes on at Newark Air Force Station. This is the Minuteman system that we are working on.

I might say just a bit about the employees that we have in our depot maintenance program. They are very highly skilled and highly specialized people. We are all geared toward the wartime readiness support, the surge requirements that are required to be accomplished whenever the bell rings. Many of these workers have a secondary skill, so whenever the requirement comes to work on some of these component things he moves over to assist in the surge workload, a very dynamic type of program.

[Slide deleted.]

Newark Air Force Station has very highly sophisticated equipment. This is a clean-room activity where they are working on inertial guidance system components.

C-141 AND C-130

Moving down to Warner Robins Air Logistices Center in Georgia, they have the responsibility to repair the C-141, and the C-130, and then they have a large responsibility to repair the black boxes, bombing navigation equipment, countermeasure equipment and those sorts of things.

[Slide deleted.]

Here we see a C-141 that is undergoing stripping and getting ready for paint, after it has completed its program depot maintenance work.

[Slide deleted.]

Here is a C-130 that is being prepared for a flight test.

I might say that during wartime the concept is that we would not do as many of the jobs on airplanes for program depot maintenance, but what we would do when the bell rings is compress the program and try to generate as many of them as we can that are in work and get them back out to the field to start the fighting task.

Those employees working on the airplanes then would switch over and work on spare parts, for example, as reparable items generate in support of the wartime scenario.

[Slide deleted.]

Here at Warner Robins, there is an example of the new facilities in our technical repair center concept that we put in the mid-seventies. This facility is our electronics repair facility for bombing and navigation electronic equipment.

[Slide deleted.]

Incidentally the depot workload in the spare parts overhaul is about one-half of the depot work. That is, one-half of the total work is devoted to the spare parts overhaul. Moving to Sacramento Air Logistics Center, they work on the F-111, the A-10, and a number of other aircraft. They also support component repair of communication electronic equipment. We are talking about antennas that support the space program. We are talking about electronics that support GCA type operations, for example.

C-5 OVERHAUL

Now, in San Antonio Air Logistics Center they have the responsibility for overhauling the C-5, the B-52G model and the H model. They overhaul some other earlier model airplanes, and some of the fighters, and it points out that as long as we have a weapons system in the inventory we must provide a depot capability to make sure that we have a reliable and safe operation.

[Slide deleted.]

This is more of the San Antonio Air Logistics Center. This is the engine repair facility and it is one of the two organic repair facilities for engines that we have in our air logistics system.

The other one is at Oklahoma City. At San Antonio they overhaul the F-100 engines, and often the C-5 aircraft engine and several other engines that make up their workload, including the J-79 engine which is on the F-4.

F-16 AND F-4

Ogden Air Logistics Center in Utah, the F-16 and F-4 aircraft are maintained there. I might explain that we have a concept in bringing in new weapons systems. When possible we co-locate the first operational wing at an air logistics center. For example, we put the F-16 at Ogden so that you have side-by-side support for supplies or technical and engineering aspects of bringing a new weapons system in the inventory.

F-4

[Slide deleted.]

Here is the F-4 in work at the depot. It points out the complexity of the depot work as compared to the field and the kind of unique equipment that is required in the depots.

At Ogden they also work on Minuteman and Titan missiles and air-to-ground, as well as the air-to-air missiles.

F-111 AND F-30

Oklahoma City Air Logistics Center, the second engine depot facility. Here is the aircraft F-111 engine, the TF-30, that is in a new facility. It is our engine test cell computerized driven and it puts the engine to a good test through all of its simulated flight profiles so that when we deliver the engine it is a reliable product.

B-52 AND A-7

[Slide deleted.]

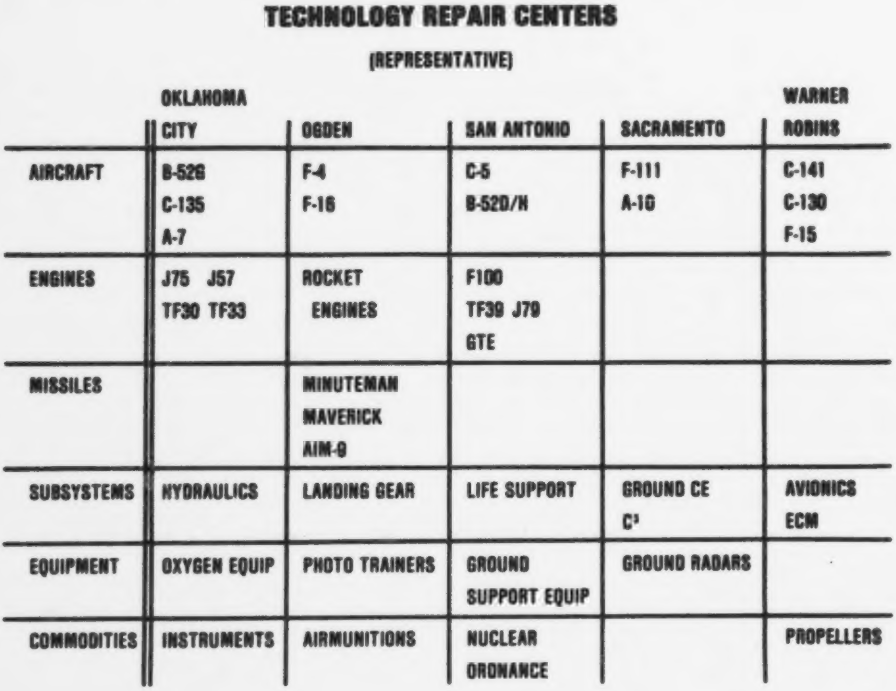
Along with the B-52 and various models of the KC-135, Oklahoma City also overhauls the A-7. The slide shows the kinds of workload, and variety of workloads that go on in an air logistics center where they are capable of working on the big airplanes and the little airplanes.

The last few years we have transitioned the A-7s from the tactical air forces to the Air National Guard and we have not made any changes in our depot support system as we are dealing with the customers.

The Air National Guard program has fit right into our normal depot support and we are able to provide them parts and technical support just as we do in the active duty force. It has worked out very well.

[Slide deleted.]

This is the new corrosion control facility at Oklahoma City that recently has come into operation over the last 2 years, and has certainly helped us to save time in the stripping and painting process. The old facility was small and it had been there for years and years and this certainly has been another one of our efficiencies of operations that is currently going on in our depot program.



TECHNOLOGY REPAIR CENTERS

(REPRESENTATIVE)

	OKLAHOMA CITY	OGDEN	SAN ANTONIO	SACRAMENTO	WARNER ROBINS
AIRCRAFT	B-52G C-135 A-7	F-4 F-16	C-5 B-52D/H	F-111 A-10	C-141 C-130 F-15
ENGINES	J75 J57 TF30 TF33	ROCKET ENGINES	F100 TF39 J79 GTE		
MISSILES		MINUTEMAN MAVERICK AIM-9			
SUBSYSTEMS	HYDRAULICS	LANDING GEAR	LIFE SUPPORT	GROUND CE C^3	AVIONICS ECM
EQUIPMENT	OXYGEN EQUIP	PHOTO TRAINERS	GROUND SUPPORT EQUIP	GROUND RADARS	
COMMODITIES	INSTRUMENTS	AIRMUNITIONS	NUCLEAR ORDNANCE		PROPELLERS

This graph summarizes some of the things that I just mentioned. The top three lines show what each of the logistics centers work on, and these bottom ones show the technical repair center concept of consolidating and amalgamating the various systems into one area where it is possible to get the most efficiency out of your skills and your work.

I have just a few pictures that illustrate some of this technical repair center work.

[Slide deleted.]

The first one is showing the fuel control on the F-111 aircraft engine. There are about 800 parts that are involved in this overhaul. The parts not only are the repair parts, but also the consumable parts.

It is very important in the Air Force, in the DOD to make sure we have the right kind of management for both the consumables as well as the repairables, to make sure that the parts are there and you can get the right kind of technical and engineering assistance to make the right kind of repairs.

KC-135

[Slide deleted.]

This is a nose cowl for the KC-135 aircraft engine, and something that faces us in the depot overhaul is aging systems and vendor support. A good number of vendors have either gone out of business or found it too costly to tool up again, but here in the depot we have the skills and capability that can go back in and rebuild systems and components such as this.

Not long ago we were faced with a problem of supplying bombing navigation components for some of our bombers, and we just were not able to get the right kind of prices to tool up, so sometimes you have to make modifications in order to overcome those kinds of deficiencies.

[Slide deleted.]

This is an electrical component for the C-130.

This is the diffuse case for the J-75 engine that goes on the F-105 and F-106. It is very costly to try to reproduce now so we have been repairing again and again. There are a great number of components and it takes a lot of innovation for people engaged in this work to recommend the technical repair to make sure it is safe.

[Slide deleted.]

This is the TF-33 engine which goes on the B-52H. The C-141 has a version of it and this is a very tedious repair process, putting in the blades in this component and in some of our technology improvements we are automating the inspection and in the future we will automate the repair of these engine blades.

[Slide deleted.]

This is a TF-41 engine that goes in the A-7 and this is an example of the inter-Service workload. We do the Navy's A-7 engines as well as the Air National Guard's A-7 engines. This is a facility in Oklahoma City. We do some work for them and they do some work for us.

[Slide deleted.]

This is the chemical cleaning facility in the engine shop. It certainly improved the efficiency of our operation. It helps us clean the engine parts more efficiently so that we can perform a better inspection and see that these parts are repaired and put back in the engine and button them up and send them off again. Certainly it has aided us in the employee working conditions.

[Slide deleted.]

This is the numerical control shop at Oklahoma Air Logistics Center. This is computer driven tooling that is coming along. We are able to overcome some of the problems of lead-time and critical components by going in and manufacturing various components. Certainly it has been a big payoff area of this technology improvement.

So these are the kinds of things that we do in the depot and I have two or three slides next that summarize the cost of doing business to get the Air Force depot maintenance program underway in 1983.

RESOURCE REQUEST

($M,TY)

	FY 81	FY 82	FY 83
DEPOT PURCHASED EQUIP MAINT (DPEM)	2167.9	2494.8*	2838.5**
INTERIM CONTRACTOR SUPPORT (ICS)	58.5	74.4	85.6
BIG SAFARI	86.3	83.4	89.2
OTHER	19.7	16.7	22.8
SUBTOTAL	2332.4	2669.3	3036.1
CONTRACT POLICY CHANGE	____	____	350.0
TOTAL	2332.4	2669.3	3386.1

*INCLUDES FY 82 CIV PAY SUPPLEMENTAL ($23.3M)
**INCLUDES FY 83 CIV PAY RAISE ($25.1M)

We talked about the depot purchased maintenance, and on the first bullet up there I show you the resources for 1981 and 1982 and 1983. You see the dollars involved, about $2.8 billion for fiscal year 1983. This is for the labor and materials to get the jobs done on the slides that we have just seen.

Another part of the program is interim contract support. This is a growing program and it is brought about by the fact that new weapon systems are coming along, such as the F-16, and E-3 and the A-10. The design is not stable enough for us to put lead-time away for the depot equipment or intermediate level equipment at the bases, or there simply is not enough money to get the logistics started and we have to make sure that we have a good program for support for 2 or 3 years.

BIG SAFARI

The big safari is a classified program. The other category deals in part with initiatives and supporting mobile depot teams, for example, to go into the battle area to do crash battle damage repair.

PROGRAM GROWTH

($M)

	CHANGE FY 83-82	INFLATION	PROGRAM GROWTH
DPEM	343.7	114.7	+229.0
ICS	11.2	4.5	+6.7
BIG SAFARI	5.7	5.1	+0.6
OTHER	6.0	0.6	+5.5

NOTE: NUMBERS MAY NOT ADD DUE TO ROUNDING.

This slide shows the changes in the program, depots, interim contract support and big safari, and other special programs. You can see the impact of inflation, but the rest of the numbers deal with bringing in a new weapons system component and it deals with changes in flying hours, and the increase of flying hours which has been discussed before your committee before for training, plus the bothersome problems of aging. The costs are more to operate weapons systems the older they get.

DPEM PROGRAM GROWTH
($M)

CATEGORY	FY 82	FY 83	INFLATION	PROGRAM
AIRCRAFT	697.2	752.4	33.6	+21.6
MISSILES	51.6	60.3	2.8	+5.9
ENGINES	238.2	280.9	10.6	+32.1
OMEI	103.3	116.1	4.9	+7.8
EXCHANGE COMPONENTS	1358.6	1577.2	61.4	+157.2
AREA/BASE	45.9	51.6	1.5	+4.3
TOTAL	2494.8	2838.5	114.7	+229.0

This specifically breaks out the program growth in aircraft between 1982 and 1983, the missiles including ICBM, air-to-air missiles, and engines, and these are other major equipment items. These are major equipment items and our definition of depot maintenance and the others deal with the dollars that we spend repairing the specialized forklifts that move equipment around aerial parts.

That ends the presentation that we had for you, sir, and what we do in the depot. I must say as we start to answer the questions, we feel like the depot maintenance program is a very essential element of this readiness equation that we have been talking about.

[The prepared statement of Brig. Gen. William P. Bowden follows:]

PREPARED STATEMENT OF BRIG. GEN. WILLIAM P. BOWDEN, DEPUTY DIRECTOR, LOGISTICS PLANS AND PROGRAMS, HEADQUARTERS, USAF

Mr. Chairman and Members of the Committee: I am pleased to have the opportunity to appear before this Committee to present an overview of the Air Force Depot Maintenance Program, an activity which is critical to the readiness of or forces.

Today I will discuss trends in our depot maintenance programs, how and where we accomplish the work, some management initiatives, and funding sources. I will provide some specifics on the core of our program and discuss some problems concerning our civilian employee depot work force.

The depot maintenance program serves many customers and is funded in several appropriations. It provides for maintenance of weapon systems, engines, major equipment and exchangeable components beyond the capability of field level maintenance organizations. Installation of modifications is also funded in the depot maintenance program. This level of maintenance requires unique skills, specialized facilities, and complex equipment not available in field organizations.

Depot maintenance is managed by the Air Force Logistics Command (AFLC). The workload is accomplished in industrial plants, either by AFLC in its own facilities (organic); by private industry (contract); by other military services (interservice); or by specialized depot and contractor teams deployed to operational sites.

The Air Force complies with the general policy of the government and Department of Defense to relay on competitive private enterprise to supply our depot maintenance when no overriding factors require in-house performance. Our organic depots are postured to provide an in-being technological base in peacetime which can be put on an expanded work week upon call and be supplemented by rapid hiring of additional skilled workers and reserve augmentation. The Air Force has implemented and is continuing to refine a decision logic process that identifies the optimum organic/contract structure needed for peacetime readiness, yet fully capable of expanding to meet wartime surge workloads. Based on dollars, the fiscal year 1983 Air Force depot maintenance program to be accomplished is distributed as follows: 51 percent will be done in our organic depots, 2 percent in the depots of the other services and 47 percent will be performed by contract sources.

While on the subject of our industrial activities, I would like to mention several management initiatives that have led to more economical operations. Over the past two decades, the Air Force restructured its logistics base to a major degree. This included closing of all seven overseas depots, numerous specialized depots in the United States, and finally in the late sixties four major Air Materiel Areas, or Centers were closed. These closures narrowed our wholesale logistics base to the five major Air Logistics Centers plus the specialized Aerospace Guidance and Meteorology Center at Newark Air Force Station, Ohio. A major element of this consolidation was the requirement to modernize the remaining depots to increase efficiency. With the support of Congress, more than $300 million has been invested in new facilities and equipment since 1971. This allowed us to retire old and obsolete facilities, thus avoiding high maintenance costs. Efficient plant layout and automated materials handling systems have permitted reduction of repair flow times, thus a reduction in repair cycle inventory was possible. From fiscal year 1973 through fiscal year 1981, our maintenance work force was reduced by 3,142 spaces, without loss of production capability, as the result of efficiencies inherent in our now modern depots.

Another productivity enhancing initiative was the realignment of technology repair centers to consolidate similar items into a single repair facility. These actions were completed in fiscal year 1976, resulting in a reduction of 1,100 maintenance personnel spaces, primarily in management and support areas.

In 1977 the Air Force took another long look at the operations of its depot maintenance activities to determine what additional improvements were required. Several actions were initiated to further enhance work force productivity. These actions included an intensive effort to tighten labor standards, improved production planning to assure full work loading of the capability, and improved material flow to the maintenance lines. The composite result of these actions is a projected gain in productivity of more than 13 percent by fiscal year 1982 when compared with the base year of fiscal year 1977. An additional percent productivity is programed for fiscal year 1983.

Our problem today is that, while blessed with comparatively modern and efficient facilities and equipment, with a replacement cost of approximately $3.5 billion, further end strength reductions in the past several years have led to underutilization of our plant. A companion problem is our inability to accomplish the assigned peacetime workload with the reduced manning levels. But more importantly, the lower manning level compromises our capability to meet wartime surge workloads. Our choices for accomplishing the essential peacetime workload are (1) excessive overtime, (2) additional contracting out, or (3) increasing the inhouse civilian work force commensurate with the funded workload. Our preference is the latter because we can add direct workers without significant additional overhead costs. For example, if we were to add an additional overhead costs. For example, if we were to add an additional 3,000 personnel to the current on-board strength the fixed overhead costs could be spread over a larger work force, resulting in a reduction of about one dollar from the average man-hour cost used in the industrial fund rate structure. The Air Force has a sustained overtime rate for the entire direct work force that is projected to exceed 7 percent over the fiscal year 1982. In addition, the Air Force Logistics Command has hired more than 3,000 non-permanent employees to meet work load demands.

We are pleased with the congressional action to allow end strength increases of 2,000 civilians in fiscal year 1981 and 3,000 in fiscal year 1982 above the levels included in the initial fiscal year 1982 President's budget. These welcomed increases have allowed us to forego major layoffs from our current work force, have a more adequate inservice work force for wartime, better plant utilization and equipment efficiency, and an enhanced ability to accomplish necessary depot maintenance workloads.

Rather than discard worn items the Air Force has a dynamic program to develop repair procedures for these items. Significant replenishment spares savings have been and are continuing to be documented based on the reclamation of would-be discarded components. For instance, turbine vanes for jet engines crack and erode through use, and formerly were replaced when tolerances were exceeded. Now, the cracks are filled, metal is restored, the vanes are reshaped and heat treated for 25 percent of replacement costs. Unique applications of laser and electron beam welding have been developed which enable us to repair many parts which were formerly thrown away. Due to aging, with the attendant fatigue and corrosion damage, we now find it necessary to remanufacture many structural items such as engine nacelles and cowling, flaps, elevators and stabilizers. Because of long production lead times, we are turning to our machine shops to manufacture limited quantities of critical items to prevent work stoppages or grounding of aircraft. We are proud of our capabilities to rapidly produce complex items using our modern, multi-axis, numerically controlled, machine tools. Improved repair processes have been developed to either do repairs cheaper, or to make the item last longer. For instance, techniques for polishing gyro bearings to a mirror finish give longer bearing life and result in less frequent overhaul of the gyros.

I would now like to turn to how requirements are determined and some of the factors that affect them. There has been much interest in Reliability Centered Maintenance (RCM) since the basic document on this subject was published by the Air Transport Association in 1970. The RCM concept is very similar to the one the Air Force implemented following the establishment of our Maintenance Management Review program and the Maintenance Requirements Review Board.

Beginning in the mid 1960's, the Air Force instituted positive programs to reduce maintenance actions on systems and equipment to minimum essential items at the least cost of ownership. Annual technical reviews were held to assess how equipment and systems were performing, to screen scheduled inspection tasks for validity, frequency and scope, and other functions accomplished by organizational, intermediate or depot maintenance activities. An additional review process was established in 1971 with the objective of eliminating cyclic depot maintenance on aircraft where possible, to extend the scheduled intervals for those remaining on a depot cycle and to eliminate any work not essential to maintaining safe, reliable and capable aircraft. The collective results of these critical reviews were a very sharp reduction in scheduled inspection programs, extension of base and depot inspection intervals and the elimination of depot cycles on more than 20 different aircraft. For instance, in the depot maintenance area, the F-4D work package is less now on a 4-year cycle than it was at a 2-year interval, and the F-106 interval has grown from 24 to 48 months while the work package was cut in half. Many aircraft are now on a cyclic interval of 4½ years.

While these actions have reduced costs and aircraft downtime to a significant degree, we are faced with an offsetting expense due to retention of aircraft far longer than was planned at the time of their design. Thus, it is necessary to extend their service life through structural modification and to incorporate new capabilities to meet the changing threat. Aircraft aging also leads to deterioration of sealants and wiring, and to extensive corrosion which require expensive rework programs. To illustrate this point, 30 percent of Air Force O. & M. funds for aircraft depot maintenance in fiscal year 1978 were for modification installation, growing to 63 percent in fiscal year 1982 and dropping slightly to 61 percent in fiscal year 1983.

Missiles and other major end items, such as ground equipment, special purpose vehicles, simulators, communications, electronic and meteorological equipment receive depot maintenance only when the condition of the individual item so dictates. Most of the depot repairs in support of these equipments are provided through the overhaul program for exchangeable components.

Our maintenance approach for engines is to do the largest part of the work on the complete engines at base level. This permits us to reduce the number of spare engines from that required to support a larger overhaul pipeline. Consistent with this practice, we have extended the maximum operating times between overhaul to the limits permitted by engineering analysis. Due to the high costs of engines, we manage them closely, including serial number tracking of performance throughout their life. Spectrometric oil analysis is performed regularly to provide condition wear patterns of each engine. Spare engines are kept to a minimum through the intensive management applied to all facets of performance, condition, repair and movement of engines.

Engine analyses using RCM concepts were directed first to mature engines where maintenance costs are high. Analyses are now complete on all major engines. The F100 engine used in the F-15 and F-16 and TF34 engine used in the A-10 were procured on the basis they would be managed and maintained under RCM concepts. The TF33 engine used on the C-141 has been removed from a "maximum operating time" table, and the TF39 engine used on the C-5 is being removed after an overhaul when 34 durability modifications are being installed. The J79 engine used on the F/RF-4 has been placed on a sortie basis rather than operating hours so that extended overhaul intervals can be realized for those engines not subjected to excessive low cycle fatigue. Maximum operationg times have been progressively extended pending achievement of the capability to move to a total "on-condition" concept. This involves the ability to track critical, life limited, components of engines under the Comprehensive Engine Management System (CEMS). CEMS is a real time computer-aided tool required for efficient diagnostic trending, critical parts tracking, configuration control, and optimum repair versus overhaul scheduling. The Air Force is moving steadily ahead with RCM application to our engines. Our goal is to eventually eliminate maxmimum operating times as the basis for overhaul.

More than half of our depot maintenance dollars are used to repair exchangeable components of aircraft, missiles, engines and other equipment. Once again, our policy is to repair most components at field level and return to the depot only those components which exceed base repair capability, thus avoiding the costly pipeline for major assemblies and end items. To reduce costs, we have restricted our investment in exchangeable item inventory, relying instead on fast moment and rapid repair to meet operational needs. The CONUS Logair transportation network and Military Airlift Command channel runs to overseas areas are essential in reducing the length of the transportation pipeline. Based on the dollar value of our exchangeable inventory, we have a turnover of more than twice a year, a reflection of the austere stock levels provided in our logistics system. This turnover translates into more than $31 billion dollars of annual demands each year, with an average cost of repair of 13 percent of acquistion costs. This large depot repair program represents only about 30 percent of the total annual failures. About 65 percent of the items are repaired at field level and the remaining 5 percent are for initial issue or are condemned because they are not economical to repair. The repair program is our prime source for providing logistics support to our forces. There is no cushion in the wholesale or retail levels to absorb a backlog of unserviceable items to meet readiness requirements. Thus, when the number of unserviceable components exceeds the normal repair cycle quantity, support to our weapon systems breaks down.

Many of the exchangeable components used in our weapon systems are very old, representing an obsolete technology. The mean-times-between-failure are decreasing, resulting in more frequent repairs. Parts availability is non-existent for many items because manufacturers no longer make parts for components over 20 years old. This leads to local manufacture or reclamation of needed parts from condemned components, often with an unwanted delay in repair of the exchangeable components. While we have modification actions underway to replace obsolete systems such as UHF radios, TACAN sets, radars, etc., there is still a profusion of these troublesome components that will be with us for several years.

I have discussed the actions to discontinue all aircraft maintenance not essential to safety and airworthiness; the limitations on cyclic repair of missiles and other end items; the management of engines to reduce overhauls and suppress spares; and the reliance on rapid exchangeables repair to support our forces. With such technical constraints on depot repair programs, and austere levels of spare engines and exchangeable components, repair backlogs compromise operational readiness. The Air Force recognizes the importance of depot maintenance to the readiness equation. Thus, barring unforeseen problems of a major dimension, the funds requested for fiscal year 1982 and fiscal year 1983 should be adequate to accomplish the work load, with a projected zero backlog.

Now, I would like to turn to the specific request for depot maintenance funds in O. & M., Air Force for fiscal year 1983. The request is for $3,386.1 million, including $25.1 million for civilian pay raises which will be requested later under a supplemental request. I show the larger number because the pay raises for fiscal year 1983 are included in the stabilized industrial fund rates that will be used for all of fiscal year 1983.

Within this request is $197.6 million for the pay of civilians and associated costs of operation of the Metrology Center at Newark AFS, Ohio; the contract maintenance and modification of aircraft used in classified programs; and interim contractor support for new systems and subsystems while organic support capability is being developed.

The principal element of cost in the depot maintenance request is $3,188.5 million for Depot Purchased Equipment Maintenance (DPEM) purchases, an increase over fiscal year 1982 of $693.7 million. This increase includes $114.7 million for rate increases in the Depot Maintenance Industrial Fund, of which the $25.1 million for fiscal year 1983 pay raises will be requested later. The remaining increase of $579.0 million includes $229 million for program growth and $350 million for a change in the method for financing our contract maintenance program. The breakout of the DPEM request, by repair category, is summarized below:

[In fiscal years and millions of then-year dollars]

Repair category	1981	1982	1983	Change 1982-83
Aircraft	547.3	697.2	752.4	+55.2
Missiles	46.1	51.6	60.3	+8.7
Engines	198.7	238.2	280.9	+42.7
Other major equipment items	88.5	103.3	116.1	+12.8
Exchangeables	1228.8	1358.6	1577.2	+218.6
Area/base support	58.6	45.9	51.6	+5.7
Passthrough to DMIF (unbudgeted inflation)	52.8			
Contract policy change	0	0	350.0	+350.0
Total request	2220.7	2494.8	3188.5	+693.7
Less fiscal year 1983 civilian pay raise			−25.1	−25.1
Net request	2220.7	2494.8	3163.4	+668.6

Note: Numbers may not add due to rounding.

Due to the dynamics of DPEM requirements, the program growth of $229.0 million, contained in the fiscal year 1983 increase of $693.7 million can best be addressed through a brief discussion of each repair category and the policy change for funding of the contract maintenance program:

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Aircraft	697.2	752.4	+33.6	+21.6

The aircraft program provides funds for programmed maintenance, analytical condition inspections, damage repair and installation of modifications. Modifications increase capability, survivability, maintainability and safety, and extend service life. The $21.6 million program growth is primarily due to the C-5 wing modification (15 aircraft in fiscal year 1983 versus 5 aircraft in fiscal year 1982), the E-4A to B conversion (2 aircraft in fiscal year 1983 versus 1 aircraft in fiscal year 1982), increased B-52 OAS/CMI and EF-111 Tactical Jamming System modification installations and increased modification requirements for the F-15 aircraft. Partially offsetting these increases is the decrease in the C-141 stretch modification (0 aircraft in fiscal year 1983 versus 62 aircraft in fiscal year 1982) and C-135 modifications, including JT3D reengining, decreasing between fiscal year 1982 and fiscal year 1983. Other major decreases include reduced modification installations on F-4 aircraft.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Missiles	51.6	60.3	+2.8	+5.9

Funds provide for maintenance and modification of in-service missiles. The missile program supports strategic missiles, drones, and various air launched missiles such as the SRAM, Falcon, Standard ARM and Maverick. The program growth of $5.9 million is primarily the result of increased Minuteman missile requirements such as the refurbishment of boosters and blast valves. The increases are partially offset by decreased Titan missile maintenance and modification installations.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Engines	238.2	280.9	+10.6	+32.1

Funds are required to provide overhaul and repair on weapon system propulsion units and engines for ground power units and auxiliary airborne equipment. The $32.1 million program increase is mainly the result of increased F100 engine/module (F-15/F-16 aircraft) repair requirements (4166 units in fiscal year 1983 versus 3501 units in fiscal year 1982) and J79-17 engine (F-4E/G aircraft) requirements increase of 25 engines in fiscal year 1983 over fiscal year 1982. The above increases are programmatically related to inventory and/or programed flying hour changes. Other program changes are primarily related to the age distribution of the engines and resultant actuarial overhaul removal factors.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Other major equipment items	103.3	116.1	+4.9	+7.8

Funds in this repair program finance the repair of a wide range of specialized equipment such as flight simulators, communications-electronics equipment, sound suppressors, training devices, special purpose vehicles and materials handling equipment. The $7.8 million program growth is primarily attributable to the aging of equipment and negotiated repair/remanufacture needs of the using commands.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Exchangeables	1358.6	1577.2	+61.4	+157.2

The repair of exchangeables or recoverable components comprises the largest single category in the DPEM program. The exchangeable repair program supports aircraft, missiles, engines and other major equipment items. The large program growth of $157.2 million results from increased flying hours and/or inventory of our more advanced weapon systems (A-10, E-3, F-15 and F-16 aircraft) with their larger numbers of subsystems and components. Other changes include (1) increased repair of B-52, C-135 and F-111 components relating to airframe aging, avionics and electronic countermeasure systems, and new components added through modifications; and (2) increased support to depot repair/overhaul of major end-items, including weapon systems. These increases are partially offset by the reduction of requirements for repair of support equipment for aircraft and missile systems.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Area/base support	45.9	51.6	+1.5	+4.3

Area support is the maintenance and/or technical assistance provided by the depots to the operating commands to assist them at base level in performing unprogramed equipment maintenance tasks which are beyond base-level capability. Base support is that field level maintenance provided by the Air Logistics Centers (ALCs) to the tenant units assigned to their bases. Examples of activities which receive this support are the F-16 Wing at Hill AFB, Utah, the B-52 Wing at Robins AFB, Ga., and the E-3A (AWACS) Wing at Tinker AFB, Okla. The program growth of $4.3 million primarily supports new systems requiring computer software support, increased requirements for precision measurement equipment calibration and maintenance support for base/tenant units.

[In fiscal years and millions of then-year dollars]

	1982	1983	Price	Program
Contract policy	0	350.0	0	+350.0

The Air Force is requesting $350.0 million of additional one-time obligational authority and revision of Section 708 of the Defense Appropriations Act to permit continuation of the economical practice of letting 12 month DPEM contracts any time during the year. These contracts will be funded within the O. & M. appropriation rather than with Industrial Funds as had been the previous practice. This funding policy change is in accordance with Congressional direction provided in reports on the fiscal year 1982 Department of Defense Appropriation Act. The policy change concerns only the manner in which the Air Force will fund depot maintenance contracts and not the actual performance of work; thus, the added obligational authority, if approved, will have no outlay impact.

Mr. Chairman, this concludes my overview of the fiscal year 1983 Air Force O. & M. budget request for depot maintenance. I would like to express my thanks to the committee for its efforts in searching out the elements of readiness and for putting emphasis on improving our ability to effectively and efficiently perform our mission. I am sure the committee and the Air Force will mutually benefit from this hearing.

Thank you for your interest and support.

General **Bowden**. We have been talking about buying more peacetime operating stocks and war reserve stocks, but all of those stock computations are based on the fact that we are repairing 100 percent of our requirements, so you know how many you have that are going to be repaired, and after that you put your buy in for your peacetime operating stocks.

Another vital element that a lot of people don't think about is the consumable items in the stock funds, so you have three things there.

We base the 100 percent funding on this if we are going to have the right kind of readiness posture.

Senator **Humphrey**. I have the impression from your last statement, General, that you don't feel sufficient attention is being given to depot maintenance.

Do I interpret that correctly?

General **Bowden**. Sir, the attention as General Gilbert pointed out on the base maintenance and repair, attention on our depot programs most certainly is turning in a positive manner. People have been supporting us on our funding over the last couple of years and the program itself has been recognized as one of the ways of helping us across the hard time that we have experienced the last couple or years on spare parts shortages. That is in the repair process.

We are getting over the last couple of years, we have been getting good support on our depot programs. Most recently in some of our preparations as we come along for the 1983 and 1984 POM, we have lots of debates over the issue of 100 percent funding on the DPEM.

Mr. McElhanon, do you have any additional things you would like to comment on?

Mr. **McElhanon**. No, I think that the worm has turned so to speak. We have gotten significant additional recognition and we are no longer putting up with the underfunding that was sort of plaguing this program in former years.

Senator **Humphrey**. General, you pointed out that levels of peacetime and wartime stocks are predicated on the ability of your people to give 100 percent.

Are you capable of doing that today with the funds that you are getting? If not, what are the problems?

MANPOWER PROBLEMS

General **Bowden**. Sir, the problem right now we are having in our depot maintenance program deals with manpower. Frankly, there are about 3,000 spaces we don't have. The number I have shown you on the first chart, about 36,000, that is what we have in our depot programs to support our computed requirements, but we need about 3,000 more people.

Senator **Humphrey**. Is there any increase in 1983, that you anticipate?

General **Bowden**. No, sir. Major Dudley here who works on that problem every day might like to comment on the current status of that.

Major **Dudley**. No, sir, there is no increase in depot maintenance in the Air Force for 1983 now, and in fact over all the Air Force civilian strength is reduced by approximately 4,400 spaces, in fiscal year 1983.

Senator **Humphrey**. Does the shortage of civilian manpower work inefficiencies, lead to inefficiencies in your operation?

General **Bowden**. Yes, it does, sir, and it goes like this: Whenever we have parts that are generated and whenever we have engine production requirements to meet and we have our major overhaul work to do on the aircraft, that work must be done. So we are stuck with overtime.

We work the good people who know the processes and you get them out there in the engine shop and we expect them to work long hours, and temporarily overhire and you have to have some program to bring new people in and start getting them experienced, but essentially that is how we work around it from an organic point of view.

But there is another way, a troublesome way that we get the work done that we can't accomplish in-house, we must go to contract. We have two or three examples on major weapon systems that we had planned to do in-house, that we had to give a piece of those projects to contract.

So it leads to a lot of unplanned activity.

Senator Humphrey. Let us examine those one at a time.

What extra costs are involved in this matter of overtime?

General Bowden. Ideally we like not to plan more than about a couple of percentage points of the total work in overtime. We believe the most recent numbers that Major Erickson looked up, it is about 10 percent, so that is counted against our total work program and you can see the kind of dollars that are involved.

Do you have any additional points?

Major Erickson. Last year the engine plant at San Antonio worked an average of 20 percent overtime for the entire shop, the entire year, and it is impossible to work a workforce at that level of overtime continuously and expect them to keep the efficiency they have when they started.

Senator Humphrey. What about payroll costs, do you have to pay these people a premium for overtime?

Major Erickson. Yes, sir.

Senator Humphrey. Have you made a calculation to see if it would be less expensive to have more full-time people than to pay the overtime?

General Bowden. Well, most certainly it would be a much more economical way to have our workforce doing the work on normal shift time. I don't have the exact numbers, but it would be very easy to provide that for the record, sir.

[The information follows:]

COST OF FULL-TIME EMPLOYMENT VERSUS OVERTIME

The average cost of a regular time hour projected for fiscal year 1983 is $12.80, including benefits. An overtime hour is projected at $15.79. However, a straight comparison of the two costs could be misleading, since overtime is the most cost effective for peak workloads and random or infrequent, short turn around workloads.

In fiscal year 1983, however, the shortage of permanent personnel and the less than satisfactory productivity achieved from temporaries have driven the overtime rate to 7 percent. This represents an unacceptably high level since overtime is not worked evenly across all resource control centers (RCC). Examples of shops involved and overtime levels being consistently worked follow:

	Percent
SA-ALC:	
T56 engine rework	19.0
J79 engine assembly	28.1
TF39 engine repair	19.2
Machine shop	32.7
OC-ALC:	
TF33 assembly	22.5
Sheetmetal	21.0
Electro/mechanical	20.6
Avionics	20.5

Surging at these levels in peacetime prevents the required expansion to war time levels. The overall degradation from a 7 percent overtime rate is that our ability to meet wartime commitments is degraded by 28 percent. In high surge, critical areas such as engines where overtime routinely is 20 percent, the war time surge capability is degraded by 58 percent.

Thus, the real cost to the Air Force of extensive overtime is not only in monetary terms, but also in terms of reduced readiness. Use of overtime for peacetime workload reduces the ability to surge to meet wartime workload levels.

There is also a noticeable reduction in efficiency from the protracted use of overtime. Employees tend to pace themselves to cover the extended work day when overtime hours become routine.

Mr. **McElhanon**. Not off the top of my head.

Senator **Humphrey**. It sounds like false economy, and is it?

Mr. **McElhanon**. It is, sir.

Senator **Humphrey**. Has there been a study which shows it to be a false economy? Has anyone ever conducted such a study?

Mr. **McElhanon**. We have two concerns as far as our depot plant is concerned. We have a rather modern plant with rather modern equipment and some productivity-enhancing things in it. It has a fixed cost that goes with managing it, with supporting and maintaining it and keeping utilities on it. We then would like to achieve two things.

No. 1, keyed primarily to having a mobilization base so that we can support the war when we throw these people into high level of overtime and overtime is then our major surge capability within that existing plant. That is what drives us.

We also get a benefit and that is you put additional production workers in this to spread that overhead cost against a broader base. We can end up, for instance, if we get the additional 3,000 people that General Bowden spoke to, with reducing the cost per manhour of all of the work produced in the shop, and not just the 3,000 but the entire cost by essentially $1 per manhour.

Those are the motivations that we have.

Senator **Humphrey**. Why doesn't that argument prevail?

Mr. **McElhanon**. That argument has not prevailed because of civilian manpower ceilings that the guys up the line have been working on.

General **Geran**. There is one thing there, that I think happens is that we have an overall OSD civilian strength total. That is divided up between the services and this last year, to be honest with you, and to look at OSD's viewpoint, I think that they saw the depot problem being more serious in the Army and Navy, and they said they will try to help the Army and Navy. The Air Force is in better shape. We won't help the Air Force. I think that is what happened. The Air Force had some arguments against that. The OSD saw it another way.

Is that essentially correct or am I off base?

Major **Dudley**. They, OSD did have a different perception of the problem. In the budget they wanted to attempt to resolve some of those problems in the other Services, and resolve some of those at Air Force expense.

CIVILIAN MANPOWER CEILINGS

Senator **Humphrey**. The civilian manpower ceilings of the industrial funding type of activities are a problem everywhere. What would you recommend as a solution?

General **Bowden**. Well, we need to make our case about how a depot, organic depot system as a national asset, as we are able to prepare for war and sustain a war. I think, we need to make sure that we sell our peers as well as our OSD people on the trade-offs that we can gain by maintaining this depot system.

But right now our recommendation is that we need to have 3,000 more people here in the foreseeable future over the next 5-year period to get the job done. I think, the better selling aspects of it, the burden is on us, sir.

Senator **Humphrey**. In your opinion you would actually save money if you were permitted to hire these 3,000 people?

General **Bowden**. We would save money and we would have a better confidence in our depot system to respond to the surges in wartime.

CONTRACTING OUT

Senator **Humphrey**. What about this matter of contracting out? How much more expensive? Is it more expensive?

I realize you have fixed overhead that you like to spread across as much workload as possible, but put that aspect aside, is it more expensive to contract this out or less?

General **Bowden**. Sir, I believe that in every case when a workload is considered and new workload that generates or for some reason we need to consider an existing workload for contracting out, we have a very good decision logic that we can run through that considers. Is the mission essential? Do you need to keep those skills on board in your depots in order to have that capability?

As you run through this decision analysis, we in fact wind up, is it cost-effective or is it not cost-effective? But in my opinion I don't believe we need to focus on cost in each and every case. We don't want to contract out all of our heavy aircraft maintenance because we need people who know how to put in the repairs for heavy sheet metal and structures, and you just sometimes can't find all of that out in industry and get the right kind of response.

There are workloads that you can, and I would call those the less essential type work that would occur in wartime scenarios, that you can in fact put off or do without until the situation can better itself and you can get the airplanes back in the depot.

Senator **Humphrey**. You are saying that maintaining in-house capability is important as a defense asset?

General **Bowden**. Yes, sir. We must have an organic depot program to be able to support the war-time effort, and I guarantee you, if we let our depot programs go down we are going to have to be filling up the bins with many, many spare parts. We have run several studies about those kinds of delays of doing without overhaul, what the expense is in buying spare parts to take their place.

SPARE PARTS

Senator **Humphrey**. Let us talk about spare parts.

What is the situation, and what yardstick do you have to measure that? Is that a constraining factor today?

General **Bowden**. The spare parts situation is getting well money-wise. We have had very good support from the Congress, from all of the staff people who are speaking the language now about logistics support and spare parts.

We in fact have put the money on the line here over the last couple of years, to start improving that. We figure by 1983 or so, the dollar situation and the on-contract situation will meet our peacetime operating stock requirements.

We are doing very well on our airlift and other war reserve spare parts and we have a good program and it looks like we still have support from the staff and people on tactical forces and so forth. But we have turned the corner on spare parts in the United States Air Force and right now we are troubled with the delivery times.

On the average, it takes 2 years across the board to get those parts delivered. So you drop the money in fiscal year 1982 and you are going to get the parts in fiscal year 1984.

Senator HUMPHREY. You say we are getting well, but the pipeline hasn't delivered yet?

General BOWDEN. That is right, but we should start based on the big emphasis on spare parts that started occuring in fiscal year 1982, we should start seeing some of those parts arriving this fall.

I talked to some of our people at the Air Logistics Centers the other day, and in some of the parts, with shorter lead times, they are going to start showing up.

Senator HUMPHREY. How much of an improvement will that make in your operation in the first year? Are you in a situation now where you have to put aside projects because you don't have the parts or you can't begin them because you don't have the parts?

General BOWDEN. There are two or three aspects to this spare parts shortage. There are some of our more complex weapons systems, avionics system and some of our engines that we don't have the particular parts or repairable parts to put in so it does delay some of that. We have to make the work-arounds with repair, and another trouble, for some parts the cannibalization that is required.

So the kinds of activities that people have been doing in the last couple of years in trying to overcome the grounding situation, they are still going to be there, but we are starting to see a little improvement in that overall thing. People are more in tune with the maintenance at the base and turnaround of the parts, and we have some models that are based on total dollars against total weapons systems that show how many more days of fighting you are building up as the dollars are dropped and as the parts are delivered.

So we have some good modeling that can tell us that by weapons systems. We are getting a little better in trying to measure our mission capability.

BACKLOGS

Senator HUMPHREY. What yardstick do you use for backlogs, and I am trying to get some sense of where we have been, where we are, and where we are going.

General BOWDEN. Our backlog program is measured on first of all, the parts that we expect to generate during the year, how many full controls that will malfunction and how many of them you are going to generate during that year back to the depot.

So those numbers then are translated into dollars for overhaul, so the measure we have been using has been total dollars in maintenance backlog.

Major **Erickson**. The backlog as we measure it, is the requirement for repair and not the number of repairable parts that might be on the shelf someplace. We don't count them as part of the backlog.

Senator **Humphrey**. Do you have some numbers you can give us?

Mr. **McElhanon**. We have some tables which show what our backlog has been. With the supplemental for 1981, this past spring, we opted to eliminate our backlog. We came very close to it. Some of the appropriation was late in the year and we didn't get the funds obligated before they expired for obligation, but fiscal year 1980 we reached our peak point, and we exceeded $100 million in backlog.

That is very important to us because perhaps like no other Service we live off the end of our repair pipeline. We don't have a large, vast volume of spares stocked in the system.

I think you may recall that General Creech in his testimony before this committee last year said that half the time he needs a part for a fighter, he doesn't have it on the base. Half of that time he is not authorized to have it because of random demands. So you zero in on that other half that he doesn't have, but should have, and that is what we were trying to shore up.

You have to have enough spares bought through the procurement appropriations to put the assets in the systems and then you have to cycle them as they generate and go through the repair process and get them serviceable very quickly or operational capability breaks down.

Senator **Humphrey**. Your figure was 1980?

Mr. **McElhanon**. $103 million. That is repair cost.

Senator **Humphrey**. And give me the progress on that, the progress since then.

Mr. **McElhanon**. Since that time fiscal year 1981 ended up at $12 million, which is again due to late receipt of funds in mid-August timeframe and we are opting to have, and right now see no reason to have, any backlog at the end of this fiscal year nor does our budget year of 1983 provide a backlog.

Senator **Humphrey**. We are finally getting well, and I am hoping we have learned our lesson on this. We will see.

I will submit the balance of these questions to you in writing and ask that you respond to them.

I think we have accomplished what we need to do here today. The record will remain open for 15 days for the submission of the requested material.

[Questions submitted for the hearing record follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. WILLIAM D. GILBERT

REAL PROPERTY MAINTENANCE OBJECTIVES

Senator **Humphrey**. What program guidance has been provided by OSD concerning real property maintenance objectives during the FYDP?

Answer. OSD guidance for the FYDP period fiscal years 1983-87 was to program real property maintenance funding to reduce the backlog of maintenance and repair as soon as possible. First priority should be given to maintenance and repair projects that directly influence the operational readiness of the combat forces and retention of qualified personnel.

Senator HUMPHREY. What objectives has the Air Force imposed for itself in this area during the same period?

Answer. The Air Force has an objective to reduce our backlog of maintenance and repair (BMAR) below $300 million, the congressional containment level, by the end of fiscal year 1983. In addition, we have programed to achieve a reduction of BMAR to a manageable level of approximately $100 million by the end of this period.

MAINTENANCE FUNDS FOR PRIORITY PROJECTS

Senator HUMPHREY. How does the Air Force insure that maintenance funds are directed towards the highest priority projects?

Answer. Execution of the maintenance and repair program is decentralized such that field commanders have the maximum flexibility to direct funds to their highest priority requirements. The field commanders are the most knowledgeable concerning individual maintenance and repair requirements of facilities on their installation. To assist in the prioritization process, each major installation has a "facilities board" which is a corporate body made up of representatives from different organizations on the installation. The facilities board provides recommendations for prioritizing requirements. The installation commander reviews and approves those recommendations. Prioritized listings of requirements are forwarded by each installation to their major command headquarters. A major command level facilities board then reviews, integrates and prioritizes requirements from the subordinate installations. From this integrated priority list, installations receive funding to accomplish the maintenance and repair projects. Headquarters Air Force provides broad oversight and policy guidance (such as maintenance/repair standards, particular problems Air Force wide that require increased attention, etc.) to the major commands and reviews/approves certain projects estimated to cost more than the major commands have authority to approve.

DEGRADATION IN TERMS OF READINESS

Senator HUMPHREY. Which Air Force commands are most degraded in terms of readiness due to a lack of funding in real property maintenance?

Answer. The commands most degraded due to inadequate real property maintenance funding are the United States Air Forces in Europe, the Strategic Air Command, the tactical Air Command, and the Pacific Air Forces.

DEMAND FOR REAL PROPERTY MAINTENANCE

Senator HUMPHREY. Which Air Force commands have the greatest demand for real property maintenance?

Answer. Following commands have the greatest demand for real property maintenance: the Strategic Air Command, the Tactical Air Command, the United States Air Forces in Europe and the Military Airlift Command.

AIR FORCES COMMANDS WITH LARGEST BMAR

Senator HUMPHREY. Which Air Force commands have the largest BMAR?

Answer. As of the end of fiscal year 1981 the Strategic Air Command, with $148 million, the Tactical Air Command, with $120.1 million, and the United States Air Forces in Europe, with $70.8 million, have the largest BMAR. Total O&M BMAR for the Air Force was $529.5 million at the end of fiscal year 1981.

REPROGRAMING OUT OF REAL PROPERTY MAINTENANCE ACCOUNTS

Senator HUMPHREY. What amount was reprogramed out of real property maintenance acounts for other purposes in fiscal year 1980, fiscal year 1981? (net, end of year versus migration)

Answer. The Air Force did not request Congress to reprogram funds out of real property maintenance for either fiscal year 1980 or fiscal year 1981. However, we have experienced migration into the RPM program from within the O&M appropriations in recognition of unfunded facility maintenance and repair requirements. History shows that actual obligations in the facility projects by contract account have exceed appropriated amounts as follows:

[Millions of dollars]

	Fiscal years	
	1980	1981
RPM requirement	$677.3	$851.4
BMAR at year-end	488.6	529.5
Actual obligation	188.7	321.9
Appropriated	110.8	257.3
Year-end migration	+77.9	+64.6

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. WILLIAM P. BOWDEN

MEASUREMENTS OF MATERIAL READINESS

Senator HUMPHREY. From the depot maintenance perspective, what are the most important measurements of material readiness?

Answer. The depot maintenance program is the major source of recoverable components upon which the operating units depend for mission capability of their weapon systems. Thus, full funding of the exchangeable repair program is essential to readiness. Repair and modification of aircraft is necessary for safety, airworthiness and improved capability to perform the missions. Deferred work in this area would lead to grounding of aircraft, thus this program should be supported.

A major concern in the depot maintenance area is that we must have an adequately manned in-house capability, covering the spectrum of technologies, to perform the peacetime workload on an efficient basis, and which forms the foundation for surging to support peak wartime workloads. Surge planning involves putting the workforce on a 60 hour (or more) workweek, curtailment of leave, reallocation of personnel to high workload areas, and hiring additional personnel. The Air Force is curently about 3,000 civilian authorizations short of the workforce necessary to perform computed wartime workloads.

In summary, the depot maintenance funding and manning levels, compared with known requirements, are the most important measurements of material readiness.

IMPROVEMENTS IN MATERIAL READINESS

Senator HUMPHREY. How does the fiscal year 1983 program contribute to improvements in these areas over previous years?

Answer. The fiscal year 1983 program continues the fiscal year 1981 and fiscal year 1982 improvements made in the elimination of depot maintenance backlog. With the funds requested for depot maintenance in the fiscal year 1983 President's budget the Air Force is projecting zero backlog for fiscal year 1983. The requested funding level allows us to fully support peacetime flying hour programs, maintain adequate levels of serviceable spares and support repair of War Reserve Material requirements. This level of readiness support was not achievable between fiscal year 1974 and fiscal year 1981. Requirements underfunding during this period allowed the backlog to grow from $14 million by end-fiscal year 1974 to $103 million by end-fiscal year 1980. The fiscal year 1981 supplemental and fiscal year 1982 amendment allowed the Air Force to reduce the $103 million backlog to $12 million by end-fiscal year 1981 and zero it by end-fiscal year 1982.

CONTRACTING OUT DEPOT MAINTENANCE

Senator HUMPHREY. What kinds of depot maintenance activities are contracted out? In what proportion? What trends have evolved?

Answer. Every major weapon system in the Air Force is supported to some extent by contract. This includes Interim Contractor Support, Contractor Logistics Support, and Classified programs. Major airframe modifications such as the C-141 stretch and C-5 wing modification are performed by contract, as well as the F-4C and large portions of the KC-135 and C-130 programs. During fiscal year 1982, portions of the F100, TF39 and T56 engine workloads were contracted out on a short-term basis to meet workload requirements. Other engines such as the J-57 (KC-135) J-85 (T-38, F-5), and J-69 (T37) are also contracted. Most of the ground support equipment and almost half of our large program for repair of exchangable components are supported by contract. At the moment, 47 percent of the Air Force's total depot maintenance funding is spent on contract. The proportion of depot maintenance accomplished by contract is increasing steadily each year.

FOREIGN MILITARY SALES IN DEPOT MAINTENANCE

Senator **HUMPHREY**. What role does support of foreign military sales play in workload planning?

Answer. The following table illustrates the relative size of foreign military sales orders to total depot maintenance customer orders for fiscal year 1982 and fiscal year 1983:

[Dollars in millions

	1982		1983	
	FMS	Total	FMS	Total
Organic	12.0	$1,872	5.5	$1,889
Contract	8.5	1,385	9.3	1,566
Total	20.5	3,257	14.9	3,455

Numbers do not add due to rounding.

From this table, it is readily apparent that total FMS workloads are less than one percent of the total depot maintenance workload, and that this level is projected to decline during fiscal year 1983.

Requirements for FMS work are combined with Air Force requirements for the same item whenever feasible, and represent too low a level to significantly affect overall depot maintenance capabilities or capacities.

OPTIMUM WORKLOAD MIX (IN-HOUSE VERSUS CONTRACT)

Senator **HUMPHREY**. What it the optimum workload mix (in-house vs. contract) and management profile (efficient, stable work force) in the Air Force view?

Answer. In the past, OSD guidance had directed that not more than 70 percent of each service's mission-essential depot maintenance workload could be done in-house. The latest draft of DoD Directive 4151.1 "Use of Contractor and Department of Defense Resources for Maintenance of Material," calls for a more logical approach to determine an optimim contract/organic split. "In-house capabilities and capacities to be established and retained as a Component's minimum organic peacetime base will be determined by a decision logic process for assigning source of repair responsibilities (organic, interservice, contract) and for determining the minimum (organic) resources required in support of the mobilization scenario. The decision logic process used should identify mobilization depot maintenance material resources that must be available in-house at the outset of mobilization."

The decision logic process in the Air Force is called the "depot maintenance decision tree." Using this process the Air Force has determined that the minimum number of authorizations (or "critical mass") required in support of a mobilization scenario is 39,000. Although currently short of this number by some 3,000, the Air Force believes that this number would result in an optimum mix of in-house/contract workload distribution.

RELATIONSHIP OF DEPOT MAINTENANCE PROGRAM TO AIR FORCE INDUSTRIAL FUND

Senator **HUMPHREY**. Describe the relationship of the depot maintenance program to the Air Force Industrial Fund. How does this relationship differ from the other services? Why?

Answer. The Depot Maintenance Service, Air Force Industrial Fund is one of the four divisions of the Air Force Industrial Fund. The so-called Depot Maintenance Industrial Fund is the management accounting mechanism which records the customers and obtains reimbursement from appropriated accounts. The revolving fund concept was also used for contract depot maintenance through fiscal year 1982, but contract depot maintenance will be financed by direct appropriation beginning in fiscal year 1983. The contract distinction was the only major difference between the depot maintenance industrial funding concept of the Air Force and the other Services.

INDUSTRIAL FUND RATES

Senator **Humphrey**. New industrial fund rates are supposed to include increases that will be directed to capital improvements. How much will be generated toward this purpose in the fiscal year 1983 depot maintenance program?

Answer. The Assistant Secretary of Defense, Comptroller, has authorized the Air Force to obligate $123.5 million for equipment purchases through the industrial fund in fiscal year 1983. Approximately $25 million of this amount will be cash outlay in fiscal year 1983 due to the extended lead times for major equipment. A special charge for depreciation has been added to depot maintenance sales rates beginning in fiscal year 1983 which will be used to generate funds for equipment purchases. A total of $56.5 million is expected to be generated in this manner during fiscal year 1983. The process of balancing cash generations, outlays and obligations will be accomplished by OSD during the annual budget review.

CONTRACT AUTHORITY OUTLAYS

Senator **Humphrey**. The one-time request for $350 million in contract authority has no outlays associated with it in fiscal year 1983. Why?

Answer. The policy change concerns only the manner in which the Air Force will fund contracts and not the actual performance of work. The change moves the point of obligation of appropriated funds to an earlier time with respect to the performance of work, but our objective is to continue to input items on the same schedule as before. Thus, since outlay is based on paying contractors for work performed, and the performance profile will not change, then no outlay change will result from the new policy.

ANALYSIS FOR CONTRACT AUTHORITY

Senator **Humphrey**. What analysis determined that $350M in authority is the proper level of request?

Answer. Our request in fiscal year 1983 is based upon removing contracts from the Depot Maintenance Industrial Fund (DMIF), yet continuing to let contracts for 12 months anytime during the year. Obligations formerly held by the DMIF must then be moved to the O&M, Air Force Appropriation. The essence of this change is to require earlier obligation of appropriated customer funds relative to the time work is input for accomplishment. The Air Force isolated each element of cost and priced it in arriving at the request for $350 million of additional one-time TOA. The first element is $86 million to buy up the expense material on hand at the contractors' plants. This material is now owned by the DMIF. The next element is $50 million for purchase of expense materials in advance of input of work so it will be available when needed. The third element is $15 million for contract obligations prior to input of work on new contracts, to cover such items as positioning of support equipment, technical data and spares; setting up storerooms and communication links; and hiring and training of people. The final amount of $199 million is the estimated value of contracts that extend into fiscal year 1984. It is worth repeating that this is viewed as a one-time TOA request which will not be repeated in future years, and for which no outlay is required.

CHANGES IN STRATEGIC PROGRAMS

Senator **Humphrey**. How are changes in force structure such as B-52s, Titans, and Minuteman IIIs, changing the requirements for depot level maintenance and workload?

Answer. Depot level maintenance and workloads fluctuate as changes in force structure occur. Normally, increases in force struture will add to the depot maintenance workload because the numbers of things requiring repair/inspection increase. A decrease in force structure would, of course, reduce workloads. With the exception of safety related maintenance requirements and modifications, depot level work on the airframe/system is discontinued unless the weapon sytem has at least two years of program life remaining. Engine overhaul and component repair are also curtailed, utilizing assets on hand and from reclamation to support the weapon system in its waning days. For instance, in the case of the B-52D we will use serviceable spares from the bases losing the B-52D and from WRM kits to support the two remaining squadrons, supplementing with repair only to the extent necessary to see the squadrons through the programmed period.

EFFECT IN TERMS OF COSTS ON CHANGES IN STRATEGIC PROGRAMS

Senator HUMPHREY. What is the net effect of these changes in terms of costs?

Answer. The net reduction of depot maintenance requirements for the B-52D aircraft and Titan missiles in fiscal year 1983 is approximately $29.4 million and $3.9 million respectively. The fiscal year 1983 Minuteman III requirements increased by $4.5 million for a one time inspection of the booster motors prior to deployment of the 50 missiles.

REPAIR COSTS TRENDS

Senator HUMPHREY. Current repair costs average 13 percent of acquisition costs. What have been the trends in this area?

Answer. The average repair cost of 13 percent applies to the exchangeable component repair program. While the mix, quantity and repair costs of items change from year-to-year, the average repair cost generally remains between 13-15 percent of acquisition costs.

AVERAGE REPAIR COSTS

Senator HUMPHREY. How do average repair costs relate to the age of the system? What are the strengths and limitations of this "yardstick"?

Answer. The primary purposed of the average repair costs is to demonstrate that repair at depot level is a significantly less costly way of providing serviceable items when compared to procurement of new items. The data comes from the Central Secondary Item Stratification (CSIS) which shows both the stock list acquisition costs and the repair costs for all transactions. Some of the items can be repaired for less than one percent of the stock list price while other items will cost as much as 70 percent to repair. Aging may cause failure rates to deteriorate but his will not necessarily change the repair cost ratio even though more items generate for repair. In other cases the scope and costs of repair may increase due to age but this would not be discernible as a trend except at a lower level of stratification that would focus on a specific item or class of items. Furthermore, while new capability modifications to older weapon systems tend to add and/or delete recoverable components to the repair spectrum, so do modifications to newer weapon systems. Other factors, regardless of weapon system age, also influence repair requirements: technical problems that decrease meantimes-between-failure, establishment of repair procedures for previously condemned items, pipeline changes, planned flying hour programs and item repair costs. Thus, because of the variables involved, and their interaction cost cannot be directly related to weapon system age. The average repair cost computation simply expresses in general terms the practicality of repair over recurring procurement. Local managers can track repair costs of their items as a tool for management, but the details would be lost in a central stratification.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY GEN. WILLIAM D. GILBERT

REAL PROPERTY MAINTENANCE

Senator LEVIN. General Gilbert, I am sure you will agree that some maintenance projects have a more direct impact on mission capability than others. Resurfacing a deteriorating runway is more important from the standpoint of an Air Force Base's mission than, say, putting a new roof on the post exchange or paving the streets of the base.

Right now, as I understand the concept of the backlog of maintenance and repair of real property, you don't make any distinction as to what portion of the backlog represents high-priority mission essential requirements and what portion represents less immediate requirements.

Why don't you coin a new acronym—BEMAR, or Backlog of Essential Maintenance and Repair, to replace BMAR so that the Congress has better idea of what your backlog of mission essential, readiness-related maintenance requirements really are?

Of the $307 million backlog you will have in the Air Force at the end of fiscal year 1982, what portion represents mission essential, readiness-related projects? Please provide a breakdown of this $307 million figure by types of projects for the record.

Answer. The Air Force does track backlogged maintenance and repair requirements according to the type, or category, of facility. This allows us to make a distinction about the essentiality of backlogged requirements. The BEMAR definition, or the backlog of essential maintenance and repair, existed until about 1973. At that time the Department of Defense changed the definition such that the Air Force now reports all requirements that were identified and validated for accomplishment in a previous fiscal year but which we had to defer due to a lack of resources. Under the BEMAR definition, interpretations of what constituted only the essential requirements were very subjective. Under the current BMAR definition, we have a more accurate indicator of the overall physical plant condition and we are still able to make some distinction about relative essentiality by collecting data by various facility categories.

Our current BMAR estimates for the end of fiscal year 1982, assuming appropriation of the $75 million Supplemental request, follows:

Category:	*Millions*
Direct mission (airfield pavements, operations, weapons systems maintenance facilities)	$120.1
Mission support (utility systems, logistics support, training, et cetera)	67.9
Quality-of-life (bachelor housing, medical, community, administrative)	84.2
Miscellaneous (roads, streets, grounds, et cetera)	35.1
Total	307.3

FISCAL YEAR 1982 SUPPLEMENTAL REQUEST FOR AF REAL PROPERTY MAINTENANCE

Senator LEVIN. General Gilbert, the fiscal year 1982 supplemental request includes $75 million for Air Force Real Property maintenance. If these funds do not get appropriated until July or August, will the Air Force still be able to obligate these funds efficiently before the end of the fiscal year?

Would it make some sense for the funds requested in the fiscal year 1982 supplemental to be transferred to the fiscal year 1983 budget so that the funds can be executed in a more orderly and efficient manner?

Answer. We are confident that we will be able to complete the engineering designs on those project such that we can efficiently obligate the funds in fiscal year 1982. For over a year we have recognized the challenge of executing the fiscal year 1982 program. We have been emphasizing to engineers in the field that project designs must be completed and ready for contracting action this fiscal year.

There are trade-offs involved in transferring the funds requested in the fiscal year 1982 supplemental to the fiscal year 1983 budget. It is true we would have a longer lead time to prepare for executing and accomplishing the projects if the funds were transferred or added to the fiscal year 1983 budget. However, there would be some loss in buying power of the $75 million due to added inflation and facility deterioration. Either way, the Air Force has valid backlogged maintenance and repair requirements for which we need the additional funding.

AIR FORCE'S POSITION ON PROPOSED TRANSFER

Senator LEVIN. Gentlemen, what is the Air Force's position on the proposed transfer of consumable item management from the individual services to the Defense Logistics Agency?

Answer. The Air Force has always embraced DOD policies and programs which improve efficiency and effectiveness in the performance of military missions. However, it has consistently cautioned against excessive centralization and consolidation of critical logistics functions which directly support combat forces. With this in mind, the Air Force has been in strong opposition to the transfer of its complex weapon system spares and repair parts to DLA since it was first proposed in 1970. Its opposition was based on the need to control vital hardware items which are at the heart of the command and control of military logistics. Only the Services have the technicians, engineers and weapon system managers to work side-by-side with item managers to make design changes necessary to improve operational capability or correct deficiencies when the items supplied do not function properly. Delays in making these fixes when dealing with distant item managers not in the chain of command with weapon system operators would have an adverse effect on weapon system readiness.

In addition, the Air Force contended the savings claimed for the transfer were based on two incorrect premises. One was that as many of the Services' complex weapon system items could be assigned per item manager as DLA's technically simple items. Two was that DLA's storekeeping functions can be equated to the comprehensive weapon system management now afforded to Service managed items.

It is the Air Force opinion that DLA will have to either decrease the intensity of management which the Services now devote to their weapon system spares and repair parts impairing military readiness or duplicate the systems and expertise now residing only in the Services, which would negate the alleged savings.

At present, the Air Force is fully cooperating with DOD in preparing to transfer 92,300 items to DLA. It views the transfer as a test of the conflicting opinions which have been voiced about it for 12 years. The Air Force is, however, concerned with the current field test and is working within the DOD Joint Implementation Group to assure an objective evaluation. The importance of this cannot be overemphasized because future management assignments of hundreds of thousands of vital aircraft and missile spare parts will be based upon it. The stakes are too high to allow anything other than a pure and objective assessment of the test, conducted over an adequate period of time to judge all of its ramifications.

TYPES OF ITEMS BEING TRANSFERRED

Senator LEVIN. What types of items will the Air Force be transferring to the DLA under the initial 200,000 item transfer currently in progress?

Answer. DOD consumable items include all supply items in the inventory which are not returned to the depot for repair when they fail. They cover a wide range from common items such as nuts, bolts, washers and technically simple components of weapon systems now assigned to DLA, to technically complex weapon system spares and repair parts which are now managed by the Services. In 1971, all DOD consumable item management was divided into a "two-world" concept. DLA was given management of commodity type items whose "relationship of like items to each other rather than to higher assemblies is generally predominant." The Services retained weapon system items whose "technical and program relationships to their parent weapon systems/equipments are of fundamental importance." Weapon system items consist of spares and repair parts, most of which were designed and manufactured exclusively for use on the weapon systems of which they are integral parts. They are more technically complex than commodity type items and are now generally managed in close association with technicians and engineers, and in programed relationships with the operation of weapon systems or end items on which they are used. 92,300 of these Air Force weapon system consumable items are currently scheduled for transfer to DLA.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY GEN. WILLIAM P. BOWDEN

NEW PRICING POLICY FOR AIRCRAFT OVERHAULS

Senator LEVIN. General Bowden, I would like to discuss the new pricing policy for aircraft overhauls and how this policy relates to modernization of the equipment in our Air Logistics Center.

As I understand this new pricing policy, we will be funding equipment modernization in the Air Logistics Center through the cost of aircraft overhauls. How exactly will this new policy work, and how does it differ from our previous policy for equipment modernization?

Answer. In previous years most of the equipment for replacement of or modernization was funded in all three of the procurement appropriations of the Air Force. In addition, the Industrial Funds paid for items costing $5,000 or less, and fast payback items with a unit cost up to $300,000 and a payback of less than 3 years.

Under the new policy, the Industrial Funds will finance all equipment procurement except for weapon system peculiar items and those items used exclusively for mobilization purposes. These costs to the Industrial Funds will be recovered through the rates charged to customers by the Industrial Funds, primarily through application of a depreciation charge in the rates. All rates will reflect these changes, i.e., for repair of aircraft, missiles, engines, other major equipment items and exchangeable components.

CHANGE IN POLICY

Senator. LEVIN. In your opinion, does this change in policy represent an improvement over past practice? Why or why not?

Answer. This is an improvement. The Industrial Fund manager will have greater latitude to procure those equipment items necessary to perform the repair work in an efficient manner. In other words, the Industrial Funds would be permitted to operate on a business-like basis as was intended in the original legislation which established the Industrial Funds. The costs of the Industrial Funds are passed on to the customer much like a commercial business would operate.

ADDED COSTS IN AIR FORCE O. & M. ACCOUNT

Senator LEVIN. What are the added costs in the Air Force's O. & M. account as a result of funding depot equipment modernization through the price of aircraft overhauls? Were there corresponding reductions made in the Other Procurement, Air Force account in fiscal year 1983 for equipment that will now be bought in O. & M.?

Answer. In fiscal year 1983 the rate increases for depot maintenance work funded by O. & M., Air Force added $56.5 million to the costs. This is based upon the estimated depreciation charges added to the costs of operations of the Industrial Fund. All other customers of the Industrial Fund must also pay their share of the rate increases.

Reductions were made in both the Other Procurement, Air Force, and Aircraft Procurement, Air Force, appropriations in the fiscal year 1983 budget to delete all items being picked up in the Industrial Fund.

FISCAL YEAR 1983 DECREASE OF WORKLOAD DEMANDS

Senator LEVIN. General Bowden, in fiscal year 1982 you are projecting an overtime rate for your civilian workforce of 7 percent. You have also hired 3,000 temporary employees to meet workload demands.

Are the workload demands requiring overtime and temporary employees permanent requirements or will these requirements decrease in fiscal year 1983?

Answer. The workload reflected in the fiscal year 1983 budget submission is approximately 800 workyears larger than the fiscal year 1982 level. The workload is projected to continue to increase through the outyears as a result of a larger and more sophisticated force structure, modifications to older weapon systems, and generally increasing spares levels.

FISCAL YEAR 1983 COST OF OVERTIME AND TEMPORARY EMPLOYEES

Senator LEVIN. What will be the cost of overtime and temporary employees in fiscal year 1983?

Answer. The overtime in the fiscal year 1983 budget is projected at 3 percent and totals $36,580,000. This level is based on attaining a projected permanent end strength somewhat higher than in fiscal year 1982. Actual overtime for direct workers is projected to be approximately 7 percent for 1982. At the current 7 percent overtime level, $85,353,333 will be expended for that purpose in fiscal year 1983. The use of 3,000 temporary employees in fiscal year 1983 would cost $79,872,000.

OVERTIME TEMPORARY EMPLOYEES MORE OR LESS COSTLY

Senator LEVIN. Are the use of overtime and temporary employees more or less costly than increasing your full-time civilian work force?

Answer. The use of overtime and temporary employees is more costly than using a permanent increase to the civilian work force under certain conditions. For short-term, peak workloads and for random or infrequent short turnaround workloads, overtime is less costly.

However, if current and projected workloads require a sustained and excessive use of overtime that degrades peace and wartime surge capabilities, then an increase in full-time civilian work force is appropriate. Under such conditions the use of temporary employees compounds the problem, since they must be released for the last month of the fiscal year to reach end strength ceilings. This result in additional overtime use and additional administrative and personnel costs, as well as the adverse impacts generally associated with personnel layoffs, such as reduced morale.

In fiscal year 1983, the latter condition exists, and the workload is destined to increase due to a larger, more sophisticated force structure, modifications to older weapon systems, and generally increasing spares levels. Projected net savings, if the required increase in full-time civilian work force were achieved, would be approximately $7,000,000 in reduced overtime, alone, with additional benefits to be gained from an improved preparedness posture and reduced administrative and personnel costs.

COST OF ADDITIONAL FULL-TIME CIVILIANS

Senator **Levin**. What would be the cost of the 3,000 additional full-time civilians you say you could use in fiscal year 1983 compared to the reductions in overtime and temporary employees you would be able to make?

Answer. The net savings realized from the 3000 additional full-time civilians would be a reduction in overtime hours of 2,316,000. These are the hours saved when reducing from the 7 percent overtime level to a 4 percent level, which we feel to be manageable and necessary for accomplishment of 100 percent funded requirements. The savings from working these hours on a regular time basis will be $6,924,840.

At the same time, a reduction in overtime usage to 4 percent restores a vital surge capability which is critical to the completion of our wartime requirements and provides the Air Force with peacetime capability to react to surges caused by workload fluctuations.

A permanent work force is inherently more stable, with fewer built-in work disruptions than the temporary employees and overtime presently in use. The net effect of these disruptions is only partially measureable, but includes a full month's layoff of the temporary workforce at the end of each fiscal year to meet end strength ceilings. By laying off the on-call and temporary employees for 1 month, at the end of the year, maintenance jeopardizes its skill base and training investments. In most cases maintenance has developed skills for these employees which are marketable and crucial to private industry (Example California). Laid off workers could pursue more permanent employment in the private sector.

Furthermore, the identification of employees to be laid off is a long and drawn-out process. Maintenance and Personnel management identify employees to be processed out and then back in after 30 days. Then the remaining employees must be shifted in order to accomplish the customer's requirement. Overtime must also increase during this time. Due to the commitment to provide 6 months employment, many times fully trained temporaries must be laid off while new temporaries remain on board.

This level of disruption reduces the true capability provided by these people. Workloads which cannot be accomplished under the degraded capability tend to migrate to contract. The result of a continuation of this condition is the loss of critical, mission essential workloads to contract.

Senator **Humphrey**. The subcommittee stands adjourned.

[Whereupon, at 11:25 a.m., the subcommittee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

FRIDAY, MARCH 12, 1982

U.S. Senate,
Subcommittee on Preparedness,
Committee on Armed Services,
Washington, D.C.

ARMY, NAVY, USMC, AIR FORCE, GUARD AND RESERVE OPERATION & MAINTENANCE

The subcommittee met in open session pursuant to notice, at 10 a.m. in room 224, Russell Senate Office Building, Senator Gordon L. Humphrey (chairman) presiding.

Present: Senator Humphrey.

Staff present: Michael B. Donley, professional staff member; Francis J. Sullivan, minority staff director; Robert S. Dotson, and David S. Lyles, professional staff members; and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON L. HUMPHREY, CHAIRMAN

Senator **Humphrey**. Good morning. The subcommittee meets today to receive testimony on the fiscal year 1983 O. & M. requests of the Reserve components.

This hearing is a natural outgrowth of the subcommittee's continuing interest in the readiness of Reserve Forces. With emphasis on realization of the total force policy the Reserve components must be manned, equipped, trained, and available on short notice to meet a full range of defense commitments. As a significant percentage of Reserve component funding, the O. & M. budget contributes to this effort.

We hope this hearing will provide an overview of Reserve component O. & M. requests, identify improvements over the 1982 budget in training and equipment, and establish what the O. & M. priorities would be if budgets were less constrained.

I am afraid that we are going to have to conclude this hearing by 12, which does not give us as much time as we might wish. I will, therefore, ask witnesses to give us a summary of their submitted testimony. The latter will be included in full in the record, of course.

General Walker, will you begin?

STATEMENT OF MAJ. GEN. EMMETT H. WALKER, JR., DIRECTOR, U.S. ARMY NATIONAL GUARD

General **Walker**. Thank you, Mr. Chairman. I have submitted a statement and I request that it be made a part of the record of this proceeding, sir, and I will make a very short oral statement with your permission.

Senator **Humphrey**. Fine.

General **Walker**. As you know, sir, the resources which support the activities of the Army National Guard fall into three appropriations: Operations, Maintenance, personnel, and military construction.

Focusing this morning on the O. & M. appropriation for fiscal year 1983, we see negative program growth amounting to about $30 million. But there is a reason for this. This is the result of a substantial one-time increase in 1982 funding for selected readiness items.

Further, there is a conversion of 600 civilian positions to full-time military that reduces our funding by $9 million. Despite this net decrease, this appropriation does have three program growth areas: $21 million is to support the fielding of new equipment; $12 million is to be used for repair and maintenance of training sites and logistics facilities; and $14 million for funding additional equipment and supplies to support mobilization and training readiness, transportation, and recruiting support.

BOOM IN RECRUITING AND RETENTION

Mr. Chairman, I am happy to report to you that our recruiting and retention is booming. At the end of February we topped the 400,000 figure in strength. In fact, we have more people onboard today than we are programed to have on September 30. This strength level represents 90 percent of our wartime requirement.

Our problem, which we are addressing now, is how do we fund this success? However, our No. 1 problem, as you know, is the same as active Army. It is equipment. Our shortfall of major items of equipment this last year improved only slightly.

I want to take this opportunity to thank the Congress for what you did for us last year: The $50 million that you appropriated for self-propelled howitzers, for armored vehicle launched bridges, for command post and mortar carriers, as well as appropriations for aircraft and truck procurement will materially increase our real readiness.

Of course we have still many shortfalls; for example, chemical defense equipment, and cold weather clothing. These are two of the main things in our organizational clothing and equipment area.

We have a backlog of maintenance and repair, BMAR, of about $60 million. This backlog will not be substantially reduced until the out-years. In fact, the mandated $15.0 million ceiling placed on us by Congress will not be accomplished until 1987.

Now Mr. Chairman, as you know, the Guard represents 46 percent of the combat troops of the total Army. I am confident that we are making real progress in the training and readiness of our personnel, and with the continued help of Congress in equipping the Guard and in furnishing and maintaining the facilities that we need, I am convinced that we will give you the quality Guard that this Nation deserves for its defense.

This ends my statement, sir. I would be happy to answer your questions.

[The prepared statement of General Walker follows:]

PREPARED STATEMENT BY MAJ. GEN. EMMETT H. WALKER, JR., DIRECTOR, ARMY NATIONAL GUARD, DEPARTMENT OF THE ARMY

INTRODUCTION

As part of the Total Army, the Army National Guard (ARNG) is a key element in the defense of the United States. The citizen-soldier of the ARNG willingly provides his time and effort to be ready should mobilization come. He must have training, equipment, and leadership necessary to help prepare him for whatever his mission may be. The resources provided to the ARNG are applied to this end and this statement will provide an insight as to what has been done in the past and what is necessary this year and in the future. At the onset, it is important to understand that the ARNG must be ready to go to war--today and tomorrow. All ARNG units have valid Total Army mobilization missions and the number of ARNG high priority units is increasing. These units provide essential combat and logistical support needed early in the deployment process. The following sections of this statement will describe the ARNG in the mission areas of organizing, manning, equipping, training, and mobilizing the force--the Army National Guard.

ORGANIZING THE FORCE

On a unit basis, the ARNG provides 33 percent of the combat divisions, nearly 50 percent of the infantry, armor, and field artillery battalions, 57 percent of the armored cavalry regiments, and 25 percent of the combat service support units in the Total Army. Further, the Army National Guard represents approximately 60 percent of the total strength of the Army Reserve Components. There is a continual review of missions and resources within the ARNG to ensure that these resources are organized in the most effective manner. This past year was characterized by organizational changes to selected elements of the ARNG force structure to meet Total Army requirements. Among the most significant was the activation of an additional armor brigade in the Kentucky Army National Guard. This brigade was formed by a consolidation of existing combat and combat support elements, permiting the Army to add combat power at minimum cost and with minimal personnel turbulence. In addition, nuclear, biological, and chemical defense (NBC) companies were added to the 50th Armored Division in New Jersey and the 49th Armored Division in Texas. A combat support aviation company was activated in Hawaii as part of the 29th Infantry Brigade, which is a roundout to the 25th Division. Other activations in the ARNG took place which increased the capability of the Total Army by a medical group headquarters and medical detachment, two ordnance battalion headquarters and eight ordnance companies or detachments, a signal battalion headquarters and two signal companies, six transportation companies and detachments, and four maintenance companies.

In FY 82, the ARNG will continue its structure modernization efforts consistent with Total Army requirements and resource availability. Significant force structure actions programed for FY 82 are the activation of an air traffic control headquarters, a medical battalion headquarters, and an ammunition battalion headquarters with three conventional ammunition companies. Military intelligence aerial surveillance organizations will be reorganized to form a combat electronic warfare intelligence (CEWI) aerial exploitation battalion. Also programmed for activation in FY 82 are a supply and service battalion headquarters, a signal company, a medical clearing company, a military police company, and two engineer detachments, all in Guam.

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MANNING THE FORCE

The ARNG has made significant gains since FY 78 when assigned strength declined to a low of 344,000. Reversal of this downward trend occurred late in FY 79 and the upswing has continued into the 1980's. With support from the Congress and the nation, the FY 87 wartime required strength of 453,000 will be reached in FY 86. As of the end of FY 81, the ARNG is 88 percent of wartime required, with a paid strength of 389,009. This includes 38,364 officers and warrant officers and 350,645 enlisted personnel. Aggressive recruiting and retention programs, incentive programs, and flexible enlistment and training options, aided by the state of the economy and the world situation, all contributed to the improvements in manning levels. Central to these successes is the professional Full-Time Recruiting Force working in conjunction with Army National Guard members at every level. The enlistment incentives and improved enlistment options also substantially aided FY 81 recruiting efforts. The split training option, for example, contributed significantly to the increase in accessions of high school seniors. The Full-Time Attrition and Retention Force was activated in FY 81 with the placement in the States of 79 personnel dedicated to retention. One-hundred seventy-nine additional retention personnel are scheduled to join units in FY 82. These personnel are tasked to reduce losses of individuals prior to expiration of term of service (ETS), the most serious retention problem facing the ARNG today. Details on accessions, attrition, and retention of specific categories of ARNG personnel are included in the following paragraphs.

The ARNG continued the Selected Reserve Incentive Program (SRIP) which started in FY 78. The intent of the program is to increase personnel readiness and to reduce personnel turbulence through longer service commitments for selected units. The program initially consisted of an enlistment bonus, reenlistment bonus, and educational assistance. In FY 81, bonuses for critical skills were added in an effort to increase accessions to shortage skills and those skills essential to unit effectiveness. With this expansion, 75 percent of the enlisted structure is eligible for enlistment bonuses and 63 percent of the enlisted structure is eligible for retention bonuses. In FY 81, the Inactive National Guard (ING) Bonus, the Affiliation Bonus, and loan repayment programs were added. The Affiliation Bonus for prior service active duty personnel with a remaining military service obligation, pays $25 per month for each month of the remaining obligation. The loan repayment program repays certain Federal guaranteed and/or direct student loans. The loans are repaid at a rate of 15 percent or $500 per year, whichever is greater, for each year of satisfactory service for individuals who enlisted, reenlisted, or extended their terms of service. The ING Bonus was terminated at the end of FY 81.

The effects of the incentive programs are evidenced by the greater strength gains in those units and in those skills authorized the incentives. Efforts to increase and expand the Selective Reserve Incentive Program (SRIP) will continue in order to maximize this valuable recruiting and retention tool. Implementation of a $2,000 Enlistment Bonus for critical skills and expansion to other critically short CMFs was accomplished earlier this fiscal year. A prior service bonus is programed for FY 84 in order to capitalize on the available resource of trained personnel. Enlistments for FY 81 totaled 96,436 or 100.7 percent of the programed objective. Concurrently, nonprior service enlistments reached 52,447 reflecting 103.6 percent of the FY 81 nonprior service objective, while prior service enlistments were 43,989 or 97.4 percent of that objective. In addition to exceeding quantity goals, quality objectives are also being met or exceeded. During this past fiscal year, 13.2 percent of ARNG enlistees scored in test category IV, the lowest category

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allowed to enlist. This is significantly below the Total Army ceiling of no more than 30 percent of accessions in this category. High school graduates and seniors continue to join the Guard at an increasing rate. In FY 81, the recruiting standard of a minimum of 60 percent high school graduates was implemented. During FY 81, 63.7 percent of ARNG nonprior service accessions were high school graduates. This percentage is expected to improve during FY 82.

The officer accessions program has also been successful. At the start of this fiscal year, the total officer strength of the ARNG reached its highest level ever recorded--38,364. The steady increase in officer strength is attributed primarily to the success of ARNG officer recruitment and accession programs. However, the increase also reflects a greater appreciation throughout the country for the vital mission performed by the National Guard and its importance to both State and national interests. Although officer assigned strength is at a record level, this represents only 93.6 percent of that authorized. Continued emphasis on funding present and future officer procurement initiatives is essential to maintain the upward trend.

The ARNG initiated the Army Medical Department (AMEDD) Officer Accession Program in March 1979 to alleviate the critical shortage of health care professionals. At the start of FY 82, AMEDD officer strength was 5,054 or 85 percent of authorized, and physician strength was 620 or 50 percent of authorized. Implementation of the first phase of the ARNG AMEDD Readiness Procurement Force Plan during FY 81 authorized one AMEDD recruiting officer for each of the medical brigades located in California, Mississippi, and Ohio. These officers are dedicated to the recruiting and retention of health care professional personnel. The AMEDD recruiting and retention program will expand the Full-Time Recruiting Force (FTRF) in FY 82 to a total of 32 AMEDD officers and three enlisted personnel. Other AMEDD positions include unlimited overstrength for selected AMEDD personnel, direct appointment, and medical and dental student commissioning in the ARNG.

Innovative basic branch officer procurement programs such as the Simultaneous Membership Program (SMP) and the Early Commissioning Program (ECP) have enhanced the Reserve Officer Training Corps (ROTC) quality and quantity of accesions to the ARNG. During FY 81, approximately 1,200 ROTC graduates were appointed in the ARNG. The trend is expected to continue with ROTC becoming a principal source of new lieutenants entering the ARNG in the future. The assignment of 100 ARNG officers to ROTC detachments under the Expand the Base (ETB) program and additional funding of ROTC scholarships for the Selected Reserve are significant factors in the current and projected increase in officer accessions through ROTC. ROTC is well on its way to becoming a truly viable source of officer accessions for the Total Army--not just the active force.

Minority strength reflected substantial gains during FY 81. At the end of this past fiscal year, 3,318 officers and warrant officers and 97,061 enlisted personnel, for a total of 100,379 individuals, or 26 percent of assigned strength, were members of minority groups. Female strength in the officer and warrant officer categories increased from 1,357 to 1,653; among enlisted personnel female strength increased from 15,383 to 17,968 during FY 81. Thus, at the end of FY 81, the ARNG included 19,621 or 5.0 percent, female personnel. The ARNG minority accessions objectives remain at achieving minority manning levels at the unit level comparable to the distribution of minorities in the local population.

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As strength has increased, so has the requirement for full-time support. The full-time support mission improves unit readiness and provides greater flexibility in meeting varied and changing mission requirements. Full-time support activities accomplish the vital day-to-day missions of the ARNG: command, control, maintenance and other logistical support, and training operations to ensure that the limited time available at unit training assemblies is used in the most productive manner. In FY 83, the full-time support requirement is programed to be 52,159; with only 36,776 personnel projected to be available, there is a shortfall of approximately 30 percent. This shortfall is the result of repeated reductions in civilian end strength and increased requirements due to greater equipment density and complexity, increased unit personnel strength, and increases in the number and type of units in the ARNG force structure.

An issue of continuing concern is that of technician compatibility, wherein technicians who are required to be members of the ARNG as a condition of employment, are assigned to military positions compatible with their technician position. At the end of FY 81, the incompatibility rate for the ARNG was 12 percent. The goal is to reduce this rate across all units to 5 percent by the end of the current fiscal year with no State having more than 15 percent of its technicians in incompatible military positions. These goals are responsive to congressional guidance. Command emphasis and improved management procedures at State level will be necessary to ensure that this goal is met. One action taken at National Guard Bureau level which will enhance this effort is implementation of a policy of granting waivers to compatibility directives only for the purpose of enhancing unit effectiveness. In the past waivers were also granted to allow career advancement of the technician. A monitoring program consisting of periodic reviews of personnel files for compatibility and audits of the individual States has been established to ensure compliance and track progress.

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EQUIPPING THE FORCE

To provide the materiel resources necessary to support the ARNG is another major challenge. During FY 81, the status of ARNG equipment was slightly improved. In order to meet full wartime mobilization requirements, the ARNG needed an equipment inventory valued at $11.8 billion. Equipment on hand is valued at $8.1 billion, leaving a shortfall of $3.7 billion from the wartime equipment requirement. In other terms, on hand assets meet 69 percent of the wartime requirement.

It is important to understand that these figures do not represent the cost of providing modern equipment, but rather would provide equipment similar to that presently in ARNG units. The increased funding provided by Congress in the FY 82 appropriation for procurement of howitzers, command post vehicles, bridging, mortar carriers, data processing equipment, 5-ton trucks, and aircraft specifically for the ARNG will make inroads into this shortfall. Additionally, funds to procure 200 M198 155mm towed howitzers dedicated to the ARNG have been identified from Army appropriations.

While most of the equipment on hand in the ARNG is deployable and supportable, some of it is old and significantly less capable than the equipment found in the Active Component. For example, some of the ARNG signal units are equipped with older generation communications equipment that will not fully interface with the newer Army systems. The only air defense capability for the eight ARNG divisions is the 30-year old 40mm "Duster," which has become progressively more difficult to maintain due to age and nonavailability of spare parts. Diagnostic test and maintenance equipment in ARNG maintenance units are designed to support older equipment and cannot accommodate new systems such as the TOW and the M1 tank. In addition to the old equipment in the ARNG inventory, many items are being carried as authorized substitutes, another area that adversely impacts upon training and would impact upon operational effectiveness in the event of mobilization. As an example, 1/4 ton jeeps are being substituted for TOW antitank weapon system tracked carriers. Improvements in this area can be expected as the ARNG is included in the Army force modernization program. Thirty-eight modernization systems are planned for introduction into the ARNG during FY 84 through FY 88. This number has doubled since last year. Included in these systems is equipment ranging from the M1 tank to personal armor systems for ground troops. Growth in the ARNG force modernization program can be expected to continue with a gradual modernization of many items in the equipment inventory. Looking at the current situation, delays in filling unit equipment shortages and in modernizing assets on hand have severely restricted improvement of materiel readiness, and in some cases, adversely impacted on training effectiveness. This is most significant during joint Active/ARNG exercises where ARNG equipment is incompatible with Active Component equipment. This could have a direct impact on the ability of the ARNG to respond quickly to a national emergency. In the event of war, the ARNG would simply have to fight with the equipment it has on hand, irrespective of age or effectiveness. In addition, deployment of ARNG units with equipment not compatible with that found in the gaining command could cause severe operational and support problems.

The ARNG organizational clothing and equipment program has improved but continues as a major problem area. Procurement from the Army stock fund is the single source for specific unit support items such as chemical defense equipment (CDE), medical field sets, tool and test sets, fire direction sets, winter clothing, and camouflage screens. The adequacy of stock fund support is critical to unit mobilization and deployment readiness. Even with additional funding provided in the FY 82 appropriation, the ARNG clothing and

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equipment shortages, which totaled over $429 million in FY 81, are not programed to be filled until FY 87. Problems in this area are compounded by rapid cost growth and increased sophistication in authorized items of equipment. Of special concern is chemical defense equipment. The shortages in chemical defense equipment have impact on both training and mobilization readiness. At present about 10 percent of the total requirement of $102 million in chemical defense equipment is on hand or on requisition. The availability of this equipment will improve gradually in the FY 83 to FY 88 timeframe, with priority of issue to early deploying units.

ARNG equipment requirements are included in the Army Acquisition Objective (AAO). Issues from the supply system are made in accordance with established Total Army priorities, ensuring that both mobilization readiness and unit training programs are efficiently supported. Priority for issue of the most modern equipment goes to the highest priority, earliest deploying units. Although significant shortages exist, wherever possible, units are provided with sufficient equipment assets to conduct a meaningful training program, regardless of deployment schedules. Much of the heavy tracked equipment assigned to ARNG units is positioned at designated mobilization and training sites. This equipment is available for ARNG use during inactive duty training and annual training at those locations. The concept of positioning unit equipment at designated mobilization and training sites is cost effective and supports both training and mobilization requirements.

The ARNG is automating its logistics management capability on a limited basis. At present, the eight ARNG divisions, 15 separate combat brigades, and three roundout brigades are operating the Division Logistics System (DLOGS). This automated system uses UNIVAC 1005 equipment which is antiquated and difficult to maintain. The UNIVAC 1005 could not be supported in a deployed environment. Extension of the DLOGS to the four remaining brigades has been deferred indefinitely due to the lack of computer hardware. Looking toward modernization, five nondivisional direct support units have received the new Decentralized Automated Service Support System (DAS3). This system automates routine supply management and provides constant inventory visibility. These systems will be extended to an additional 43 ARNG Direct Support/General Support (DS/GS) units during FY 82 and FY 83. Replacement of the DLOGS UNIVAC 1005 with the DAS3 system is scheduled for completion in FY 87.

Aviation support deserves special mention. The ARNG Aviation Logistics Program has proved its effectiveness by exceeding the Department of the Army operational readiness rate for the past 6 years. This is especially significant when consideration is given to the varied aircraft systems supported by the ARNG maintenance program. At present, the Army National Guard is authorized a total of 2,739 aircraft, including a 10 percent operational readiness float. The bulk of the fleet is comprised of utility, observation, and attack aircraft. Of the 2,580 aircraft on hand, only 1,822 are first-line aircraft, comparable to those found in the Active Component. For example, of the 409 attack helicopters authorized, only 26 are modernized AH-1S TOW Cobras. The remaining attack aircraft are older aircraft possessing limited mission capability. During FY 81, 13 AH-1S modified "TOW Cobra" attack helicopters were transferred from the Active Component into the ARNG aircraft inventory. In addition, 12 newly produced, fully modernized AH-1S aircraft were received directly from the factory. These 12 aircraft were the first new AH-1S aircraft to be produced for, and issued to, the ARNG. During FY 82, seven additional AH-1S aircraft are scheduled to be transferred from the Active Component. Eight of the ARNG attack helicopter companies and six of the air cavalry troops are projected to have the resources necessary to accomplish mission-related training by the end of FY 83; however, many other units will not have the AH-1S system and must continue to train with

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nondeployable aircraft. An additional problem faced by the ARNG is the introduction of new aircraft into the Active Component without introduction of the same equipment into the ARNG. A limited number of new aircraft are required to train ARNG high priority maintenance units to ensure that they can support the AC in the event of mobilization. An initial effort to assist in this area will be the issue of four UH-60s to the ARNG during FY 83. Additionally, as a result of FY 82 congressional action, 12 additional new production AH-1S aircraft and six C-12D aircraft will be procured for the ARNG.

A related issue to equipping the force is that of providing facilities for use by ARNG units. The ARNG operates, through the various States and territories and the District of Columbia, 2,821 armories, 1,635 logistics and maintenance facilities, 270 training sites, and over 200 other facilities. Under the provisions of the United States Code, support for these facilities varies from full Federal funding of training sites to full State funding for armory operation and maintenance. At the start of this fiscal year, there was a federally funded Backlog of Maintenance and Repair (BMAR) amounting to $55.6 million. This was an increase of $11.3 million over FY 81. Funds are programed to reduce BMAR to $15.2 million, the ceiling established by Congress in 1978, by FY 87.

In addition to these maintenance and repair requirements, military construction projects represented a backlog of $740 million in FY 81. This backlog is expected to grow to $800 million by the end of this fiscal year. The principal reasons for this situation are increasing requirements for ranges and construction cost escalation. With construction costs escalating at approximately 10 percent a year, an appropriation of $80 million per year would be required to hold the backlog constant, even without additional projects. The budget request for the FY 82 military construction program was $47 million. Congress added $20.7, million providing a total of $67.7 million for FY 82, which is still much less than the required $80 million. The FY 83 construction request is $51.1 million, or only 65 percent of the FY 82 appropriation, allowing further growth of the construction backlog.

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TRAINING THE FORCE

The core of the ARNG training program is the training assembly. Each member of the Guard is scheduled for 48 training assemblies. In addition to these assemblies are a number of innovative, highly productive training programs; these are highlighted in the following paragraphs.

The Active Component/Reserve Component (AC/RC) Partnership Program, which includes all ARNG divisions, separate brigades, armored cavalry regiments, aviation attack helicopter companies, and air cavalry troops was implemented in 1980 to solidify the mutual support relationship already established. The Partnership Program is a year-round effort whereby AC units provide training support, evaluation, and assistance to their designated ARNG partner units. Another program is Affiliation Training which continues to be an outstanding vehicle for improving the readiness of selected ARNG units through dedicated support by AC units. This program is composed of three elements. The first is Roundout, wherein ARNG units are designated to raise AC divisions short units to desired structure. The ARNG has four brigades and six battalions designated as roundout affiliates. The second program, Augmentation, identifies ARNG units which will increase the combat power of AC divisions or brigades that have a standard configuration. The ARNG has five brigades designated as augmentation affiliates. The last program is Mobilization and Deployment Capability Improvement (MDCI). In this program, ARNG units that require dedicated AC assistance to meet mobilization or deployment schedules are affiliated to improve their readiness condition. ARNG units in this category do not deploy with the AC sponsors. The ARNG presently has 39 battalions and 71 company-size units designated as MDCI affiliates. During the past year, this program has been expanded with the addition of eight ARNG battalions and 55 company/detachment size units. These units were selected because they are scheduled for early deployment in the event of mobilization.

Department of the Army has developed procedures which officially establish a direct link between all Army units and their wartime chain of command. This initiative, the Army CAPSTONE program, is designed to improve wartime planning and preparation through the organization and training of a force structure designed to meet a particular contingency mission. Under CAPSTONE, the wartime chain of command, probable wartime mission, and probable area of deployment are designated for each unit. Training readiness improvements continue, designed to compliment CAPSTONE. For example, in 1982, 108 ARNG units will participate in approximately 2 weeks of intensive training with overseas commands. This realistic deployment training is the most effective way to fully expose Guard units to their NATO mission during a 2-week training period. This type of training supports the objective of providing Guard soldiers realistic, mission-oriented training, performed in the geographic area of probable employment with AC units. Further, the success attained by ARNG units in responding to mission requirements, immediately upon arrival in an overseas area, is a vivid example to the AC gaining commands and NATO allies of the operational effectiveness of ARNG units. This program provides opportunities for exercising assembly, movement/deployment, and employment. This is the Total Army in action. In coordination with the AC, the ARNG has developed a 5-year schedule for participation of units in overseas deployment training.

ARNG participation in Joint Training Exercises (JTX) continues to provide units with training opportunities that are not normally available in a unit training environment. ARNG combat, combat support, and combat service support units are tasked to perform realistic missions alongside their active counterparts in a joint service environment that challenges them to produce under realistic and stressful conditions. During FY 80 and FY

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81, the ARNG deployed a complete infantry battalion to Europe, where they drew POMCUS stocks and participated in JTX REFORGER. The success of this exercise proved the capability of the ARNG to respond to its deployment mission direct from home station. In coordination with AC, ARNG has developed a 5-year exercise schedule for participation of major ARNG units in the JCS joint exercise program.

At the local level, training of individual soldiers, leaders, staffs, and units continue to focus on increased use of local training sites and taking full advantage of training devices and techniques, such as scaled mini-ranges. Travel time reductions plus improved performance-oriented training should provide enhanced readiness and increase retention and recruiting. Where local training is not possible or cost effective, travel funds are necessary to move these units to appropriate training sites. An on-going Training Site Requirements Study (TSRS) is being conducted to determine the types of facilities necessary for expanded use of training sites.

Military education of ARNG personnel provides a means for the individual to acquire new professional skills, enhance existing skills, and to be prepared to accept greater resposibilities in more complex job assignments. In FY 82, military education of the ARNG will continue the growth of past years with increased participation by officer and enlisted personnel in Active Army service schools, DOD schools, Army Area schools, USAR schools, and unit schools. This past year, 60,991 ARNG personnel enrolled in these schools, representing an increase of 6,209 over FY 80. Over 70,000 ARNG personnel are expected to attend this type of training in FY 82. The ARNG Undergraduate Pilot Training (UPT) quotas increased from 90 in FY 81 to 140 students in FY 82, with a ramp-up to 205 in FY 85 and after. To enhance pilot tactical training in the States, the U.S. Army Aviation Center (USAAVNC) is conducting a special Night Hawk/Night Vision Goggles method of instruction course for ARNG Instructor Pilots (IP). Development of this IP cadre is essential to meet Aircrew Training Program premobilization objectives of a total day and night aviation combat and combat support capability. Since the introduction of the Continuing Health Education (CHE) program in the ARNG, the number of students, primarily doctors and nurses, has increased from 18 in FY 78 to 363 in 1981. FY 82 student population will well exceed 400. This program is seen as a major factor in the recruitment and retention of medical personnel.

The National Guard Bureau conducted three new courses of instruction: The Unit Size Company Commanders Course; the Teach, Advise, and Counsel (TAC) Officer Training Program; and the Direct Appointment Orientation Course at the National Guard Professional Education Center (NGPEC) at North Little Rock, Arkansas. The Unit Size Company Commanders Course is designed to develop managerial and leadership skills and techniques which are essential to successfully command a company-size unit. The purpose of the TAC Officer Training Program is to ensure standardization of leadership aspects of the ARNG State officer candidate schools. The Direct Appointment Orientation Course provides officers and warrant officers who have received a direct appointment, with an orientation of basic principles and concepts of the United States Army system of operation.

The Puerto Rican English Technical Language School (PRETLS) will continue in FY 82 with funding from the National Guard Bureau. The school is designed to provide elementary and intermediate English language instruction to Puerto Rican ARNG trainees. It also provides pre-basic training to the student. The graduate of this course is expected to enter basic training within 30 days. Attrition among graduates of this program has been significantly reduced during initial entry training.

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State military academies conduct NCO schools, with an enrollment of over 15,000 enlisted personnel. The State officer candidate schools continued to be the largest source of junior officer accessions for the ARNG, graduating 1,356 students in FY 81 and projected to graduate 1,387 in FY 82. The ARNG provides students to the Combined Arms and Service Staff Schools (CAS 3) at Fort Leavenworth, Kansas. Participation began in FY 81 with seven ARNG personnel enrolled. Thirty-five personnel are expected to attend during this fiscal year.

Two areas which continue to receive special emphasis are those of nuclear, biological, and chemical (NBC) training and the Key Personnel Upgrade Program (KPUP). Action was taken early in FY 81 to accelerate the manning of unit level NBC positions, resulting in 85 percent, officer and enlisted, of the chemical specialist positions filled at the end of FY 81. Concurrent with supporting chemical defense training, there is a requirement to provide contingency chemical defense equipment (CDE) for high priority units. The ARNG goal is to provide contingency items by FY 83 for all early deploying units.

The Key Personnel Upgrade Program (KPUP) provides the opportunity for selected ARNG officers and NCOs to train with an AC counterpart for the purpose of improving the individual's military skills and the training readiness of his units. This program was initiated this past fiscal year with 200 personnel participating. An additional $3.0 million was appropriated to support KPUP in FY 82. This will allow key personnel from high priority units and combat units to train with an AC counterpart. Eighteen million dollars is programed for FY 83. This will support the objective of increasing participation to approximately 2,000 personnel. Expanded participation will allow for small units (squads, sections, etc.) to train with an AC unit during field training exercises. In addition to KPUP, funds are provided in the FY 83 budget submission for headquarters staff training, travel for environmental training and 3-week annual training for participation in joint readiness exercises. These training initiatives will provide additional training time for high priority ARNG units.

In the area of aviation training, the ARNG initiated the standardized, nationwide implementation of the Aircrew Training Program. The program phases in an ARNG capability to meet premobilization objectives and a capability to train to full mission capacity upon mobilization. In addition, premobilization aircrew qualification/proficiency will be standardized among like units with identical premobilization missions. Expansion of the Army's Flight Simulator Program to all States in FY 82 will provide the means for ARNG aviators to receive training in UH-1H emergency condition recognition training. Prior to FY 82, the program was restricted to aviators located within 200 miles of the simulator, but the positive feedback and documented emergency action improvements supported the expansion of the simulator program to include all aviators assigned to UH-1H cockpit positions.

Guard aviation provides approximately one-third of the Total Army aviation program; ARNG aviators are programed to log more than 28,000 Aircrew Training Manual (ATM) creditable hours in flight simulators during FY 82. Ninety-one percent of the 293,375 hours in the FY 81 program were applied toward aircrew training requirements in conjunction with unit mission support. Briefly stated, ARNG aviation remains cost effective in the utilization of flying hours to train aviators and units.

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MOBILIZING THE FORCE

Mobilization preparedness represents the ultimate objective of all the efforts of the ARNG. The Chief, National Guard Bureau, through the Director, Army National Guard, is responsible for producing effectively manned, trained, and equipped units prepared for mobilization. Selected ARNG units are now assigned POMCUS, are included in the Rapid Deployment Force, and are being considered for direct deployment. This is in addition to providing numerous essential forces to support the major plans of the Army. This continued and increased reliance on the ARNG has underscored the need to streamline the mobilization process, increase mobilization awareness and improve response capabilities.

To meet these challenges, the ARNG has actively participated in the development of new mobilization planning guidance and is in the process of reorganizing the State Area Commands (STARC) for more effective execution of both pre-and post-mobilization missions. Various exercises have been conducted or are scheduled to evaluate mobilization readiness. One such exercise is the Readiness for Mobilization Evaluation (REMOBE). REMOBE is conducted by the STARC for selected high priority units in each State. Major objectives of the exercise are evaluation of the unit capability in mobilization planning, readiness, and the impact of readiness improvements. During FY 81, 22 ARNG units participated in these exercises and additional participation is planned for FY 82. A second exercise is the Mobilization Deployment Exercise (MODEX), also conducted by the STARC. It is designed to enhance the overseas deployment training program. Selected ARNG units deploying overseas complete a mobilization capability evaluation and certification for deployment prior to departure. During FY 81, 12 ARNG units tested this program for feasibility and impact. The results were overwhelmingly positive and all units scheduled for overseas deployments during FY 82 will be encouraged to conduct a MODEX. Further, the JCS biennial mobilization exercise (MOBEX) is in the initial planning stages. The primary thrust of this exercise for the ARNG is expanded participation of the STARC, unit participation at the mobilization stations and an evaluation of mobilization plans and execution capability.

SUMMARY

The ARNG plays a central role in our national defense. The capability of the citizen soldier to respond to the most demanding wartime missions is a matter of record. This status report has provided a description of what the ARNG is doing to ensure that the resources necessary to allow him to respond in the most effective, efficient manner are available. Much progress has been made in recent years. With the support of Congress, this momentum will continue into the future.

The budget summary is provided on the following pages.

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BUDGET OVERVIEW

OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD

The Operation and Maintenance, Army National Guard FY 1983 budget request has been carefully developed to provide balanced support for training operations, logistics, base operations, depot maintenance, management, recruiting, and medical support.

The FY 1983 request of $1.12 billion includes cost growth of $64.2 million and negative program growth of $29.7 million. This request provides needed improvements in training operations; logistical support; base operations; and medical support. Significant program changes are represented by the increase in the density of new major items for repair parts ($20.9 million), training sites and logistical facility maintenance reduction in backlog/serious hazard abatement ($12.3 million), improved communication and automation equipment in support of mobilization readiness ($6.7 million), and the major decrease in organizational clothing and equipment ($66.7 million). This decrease is the result of substantial additional funding for FY 82; the FY 83 funding is consistent with years prior to FY 82. The funds requested will provide significant readiness improvement within the Army National Guard.

It must be recognized that readiness improvement of Army National Guard units is contingent on the ability of these units to maintain authorized strength, and also on the alleviation of OMARNG-funded organizational clothing/equipment and repair parts shortages totaling $388.0 million at the end of FY 1983.

Details of the major activity groups are included in the following paragraphs.

- TRAINING OPERATIONS

This activity group provides training support of Army National Guard (ARNG) units for the mission of furnishing combat ready Army National Guard forces at the time of mobilization. It provides for the pay of full-time training technicians assigned to ARNG units, training support, training aids, inactive duty training travel, technician school travel, and tuition. This funding supports the needs of 3,369 company-size units located throughout the 50 States, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia.

The FY 1982 estimate does not include the FY 1982 4.8 percent GS/WG pay raise of $3.9 million it does include a reduction of $7.8 million for internal reprograming and $.5 million for internal realignment due to man-year recosting of technician personnel. An increase of $.4 million is requested in the program supplemental for health benefits.

The FY 1983 request provides cost growth of $4.3 million program growth of $7.0 million and a reduction of $8.4 million from the FY 1982 base program in training technicians cost attributed to the conversion of military technician spaces to full-time military.

- LOGISTICAL SUPPORT

This activity provides for Army National Guard (ARNG) forces in accordance with readiness objectives and the overall mission of support Active Army forces with combat ready Army National Guard units upon mobilization.

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The FY 1982 estimate does not include the 4.8 percent 1 October 1981 GS-WG pay raise of $15.6 million; adjustments are included for technician costs based on a change in projected conversions of $7.8 million; $1.0 million for health benefits included in an FY 1982 Program Supplemental, a major increase for organizational clothing and equipment of $49.3 million.

The FY 1983 request provides cost growth of $47.7 million program growth of $40.3 million which includes items such as a reduction of $66.7 million for organizational clothing and equipment, and increases in $20.9 million for repair parts, and $2.7 million for flying hours and recruiter vehicles. These increases are essential to support the full-time recruiting force in their efforts to maintain ARNG assigned strength and to increase the mobilization readiness of ARNG units.

- BASE OPERATIONS

The base operations provides for the operation, maintenance, and repair of State-owned or operated training sites and funds provided to the Army for opening, operating, and closing costs for Active Army training sites used by the Army National Guard for annual training. Additionally, this activity group provides for the Federal share of maintenance, repair, operations, and minor construction costs of facilities and installations under State contracts.

The FY 1982 estimate of $73.5 million as provided for in the FY 1982 Amended President's Budget reflects a reduction for OSHA requirements by $1.6 million. The revised estimate is $71.9 million.

The FY 1983 request includes cost growth of $4.4 million and program growth of $12.3 million which provides for maintenance and repair of facilities. The increased funds budgeted for maintenance and repair will be used for requirements in order to reduce BMAR and serious hazard abatement.

- DEPOT MAINTENANCE

This portion of the budget provides for the major overhaul and modification of aircraft, surface vehicles, and equipment beyond the capability of the State to perform. This depot level maintenance is performed by the Army Industrial Fund and contract. Aircraft depot maintenance requirements are determined in line with inspection criteria of the Army Aviation Command. Surface vehicle and equipment depot maintenance requirements are determined in accordance with Army standards and standardization requirements.

The FY 83 request provides cost growth of $2.5 million and program growth of $1.7 million. Growth in depot maintenance during FY 83 is attributed to the increasing age of the surface and aviation fleet and the diversification of types of equipment requiring support. Increased mix is the result of limited modernization assets being added to existing equipment of varied vintage and condition. Further, the ARNG has taken the initiative to combine depot rebuild with required equipment conversions, thus saving transportation costs and increasing equipment availability. Also included is a decrease of $1.1 million associated with unfinanced FY 83 Industrial Fund pay raise.

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- RECRUITING SUPPORT

The recruiting support budget provides funds to support recruiting and retention activities of the Army National Guard. Activities include advertising, printing of recruiting and retention materials, race relations/equal opportunity materials and public information materials in a concentrated effort to recruit and retain members of the Army National Guard.

The FY 1982 estimate of $12.4 million has not changed.

The FY 1983 request includes cost growth of $.8 million and program growth of $.2 million for increased recruiting support.

- MEDICAL SUPPORT

The medical support budget provides for the local procurement of medical supplies required for emergencies; emergency medical care at non-Federal hospitals of ARNG members injured while participating in training; initial and periodical physical examination at non-Federal facilities when Government facilities are not available; and for immunizations and replacement of spectacles, dentures, and prosthetic devices when damaged as a result of participation in authorized training.

The FY 1982 estimate supports medical costs for additional paid drill strength and full-time military personnel. These full-time military personnel serve under Title 32, U.S.C. (State control) making it necessary to fund their medical entitlements from the OMARNG appropriation.

The FY 1983 request includes cost growth of $.5 million and negative program growth of $.3 million.

- HEADQUARTERS AND COMMAND SUPPORT

The headquarters and command support portion of the budget provides for the pay and benefits of civilian employees assigned to the National Guard Bureau, the National Guard Computer Center, the National Guard Personnel Center, the Army National Guard Operating Activity Center, and ARNG technicians assigned to State Headquarters Activities. Also included in the operational costs for these activities are supplies, travel and per diem, publications, equipment, and Federal Employees Compensation Act payments to employees of the Army National Guard.

The FY 1982 request has not been adjusted to include the 1 October 1981 pay raise (4.8%) of $1.1 million. An increase of $90 thousand is requested by Program Supplemental for health benefits and an increase of $.5 million for internal realignment in technician personnel cost is attributed to a lesser number of conversions.

The FY 1983 request includes cost growth of $2.1 million and a program growth of $5.7 million.

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ARMY NATIONAL GUARD BUDGET

($ in Millions)

National Guard Personnel, Army

The FY 83 National Guard Personnel, Army (NGPA) budget request of $1,681 million provides pay and related expenses for ARNG personnel. This request supports an end strength of 417,019. The number of Army National Guardsmen on full-time active duty increases and modest growth is achieved in command post exercise training. The Guam National Guard is fully supported in FY 83. New initiatives in school training are primarily for increased aviation training and noncommissioned officer training. The incentives program requirement, which provides enlistment and reenlistment bonuses, is $52 million.

TABLE 1

U.S. Army National Guard
(End Strength)

	FY 81 Actual	FY 82 Estimate	FY 83 Request
Pay Group A	348,865	353,002	369,147
Pay Group F	17,379	19,600	20,000
Pay Group P	12,713	13,975	13,453
Full-Time Active Duty	10,052	11,439	14,419
TOTAL	389,009	398,016	417,019

TABLE 2

National Guard Personnel, Army
($ in Millions)

	FY 81 Actual	FY 82 Estimate	FY 83 Request
Pay Group A/P	749	789	952
Pay Group F	166	175	206
School Training	43	50	68
Special Training	26	44	75
Administration/Support	191	272	380
TOTAL PROGRAM	1,175	1,330	1,681

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OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD

The funding categories of the FY 83 Operation and Maintenance, Army National Guard (OMARNG) appropriation (below) support the projected National Guard end strengths depicted in Table 1. This request also supports 22,357 civilian employees.

TABLE 3 Operation and Maintenance, Army National Guard
($ in Millions)

	FY 81 Actual	FY 82 Estimate	FY 83 Request
Training/Operations	167	139	136
Depot Maintenance	50	52	56
Logistical Support	602	749	756
Medical Support	6	8	8
Base Operations	60	72	89
Recruiting	10	12	13
Management Support	53	58	66
TOTAL PROGRAM	948	1,090	1,124

MILITARY CONSTRUCTION, ARMY NATIONAL GUARD

The FY 83 request for Military Construction, Army National Guard (MCARNG) (below) provides for 43 major projects. Included in the major projects are 20 armories, four aviation facilities, eight training facilities, eight vehicle maintenance facilities, two logistics facilities, and one motor vehicle storage building.

TABLE 4 Military Construction, Army National Guard
($ in Millions)

	FY 81 Actual	FY 82 Estimate	FY 83 Request
Armory	12	29	16
Nonarmory	21	32	17
Minor Construction	7	4	15
Planning and Design	2	3	3
TOTAL	42	68	51
TOTAL ALL APPROPRIATIONS	2,165	2,488	2,856

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Senator HUMPHREY. Thank you.

General Berkman?

STATEMENT OF MAJ. GEN. WILLIAM R. BERKMAN, COMMANDER, U.S. ARMY RESERVE

General BERKMAN. Thank you, Mr. Chairman.

Before proceeding with the summary, I too would like to offer for the record a longer and more detailed statement and request that it be made a part thereof.

The fiscal year 1983 Operation and Maintenance Army Reserve budget request is for $686.4 million. This represents a very modest increase over the fiscal year 1982 level, and the increase is accounted for almost entirely by cost growth. In terms of real buying power or constant dollars, the fiscal year 1983 request is approximately $14 million below the 1982 level of funding. This situation exists primarily because of the significant OMAR increases approved for fiscal year 1982 for the purchase of OMAR-funded equipment for Army Reserve units.

The Army Reserve IRR consists of over 438,000 men and women in troop program units and in the Individual Ready Reserve. For the past few years, a major objective in the Army Reserves has been to improve the personnel strength of units. In fiscal year 1978, paid drill strength bottomed out at about 185,000. Since that time there has been steady progress, with a gain almost 40,000 through December of 1981.

The fiscal year 1982 and 1983 budgets are based on continuation of the fiscal year 1981 experience and increases in strength, and we are projecting a paid drill strength at 237,000 by the end of fiscal year 1982, and approximately 251,000 by the end of fiscal year 1983.

RESERVE EQUIPMENT SHORTAGES

Equipment, together with personnel and training, are key ingredients of the readiness equation. Equipment shortages have plagued the Army Reserve, as they have the total Army. Major credit must be given to the Congress for the impetus which has enabled us to begin to address this problem. We are now building on those congressional initiatives which provide funding not only for our operations account, but for the procurement accounts as well, to begin reducing the critical equipment shortages that adversely affect readiness.

The funding provided in fiscal year 1982, coupled with that requested in fiscal year 1983, will allow us to reduce that portion of the equipment shortage that falls within the operation and maintenance account to approximately $70 million by the end of fiscal year 1983. This is indeed substantial progress since in fiscal year 1981 our shortage was approximately $280 million. The shortage in major end items of equipment represents a greater challenge, but some inroads are being made there, especially with regard to equipment required for the Army Reserve units that have been included as part of the Army's Rapid Deployment Force and other early deploying forces.

During fiscal year 1983 we expect to receive quantities of 13 new equipment systems under the Army modernization program, and the budget includes $13 million to support these new systems.

Other initiatives that we are requesting funding for in the fiscal year 1983 budget request include improvement of automated systems, force structure changes, training enhancements, and for the first time, a program to improve the strength of the Individual Ready Reserve by offering a program of direct enlistment into the IRR.

The fiscal year 1983 budget request for $686 million builds upon past accomplishments by further improving the ability of the Army Reserve to organize, man, equip and mobilize in support of our Nation's strategy. We are confident that the programs requested in the fiscal year 1983 budget request will enable the Army Reserve to continue the momentum gained in the past few years, and that units and individuals will continue to make progress toward readiness goals, provided that sufficient and required resources for personnel, equipment, training, and facilities are made available.

Mr. Chairman, that concludes my summary, and I am prepared for your questions.

[The prepared statement of General Berkman follows:]

PREPARED STATEMENT OF MAJ. GEN. WILLIAM R. BERKMAN, CHIEF ARMY RESERVE, DEPARTMENT OF THE ARMY

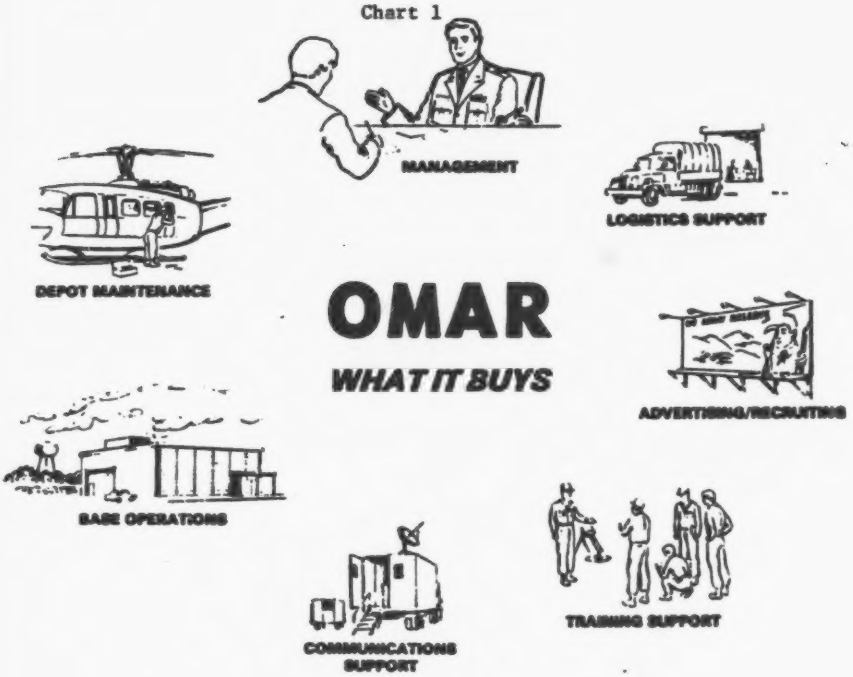
INTRODUCTION

Mr. Chairman and Members of the Committee

It is a pleasure to appear before the committee to present the authorization and budget request for the Operation and Maintenance Army Reserve (OMAR) Appropriation. The total request for this appropriation for FY 1983 is $686.4 million.

Before going into details of the FY 1983 request, I would like to discuss the OMAR appropriation in more general and functional terms. The appropriation finances the costs of activities related to operating and maintaining the Army Reserve except for the pay of Reservists. Some of the major categories of costs are the pay of civilian personnel; contract services for repair of facilities, utilities, fuel, supplies, and repair parts for equipment. The major functions financed by the OMAR appropriation are shown on chart 1.

Chart 1


MANAGEMENT
LOGISTICS SUPPORT
DEPOT MAINTENANCE
OMAR
WHAT IT BUYS
ADVERTISING/RECRUITING
BASE OPERATIONS
TRAINING SUPPORT
COMMUNICATIONS SUPPORT

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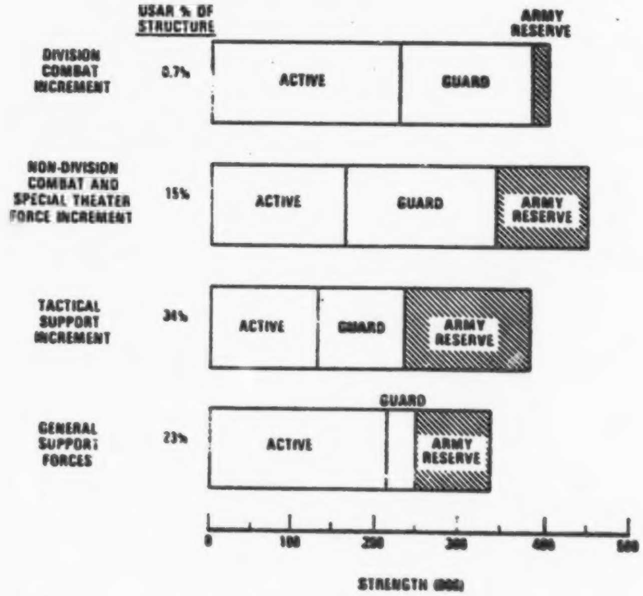
Today's Army Reserve is an integral and essential part of the Total Army and must be capable of performing wartime missions from the outset of hostilities. The number and types of units in the Total Army are determined by requirements for a balanced 24-division force, including necessary support. That force is then allocated to the Active and Reserve Components. Each element of the Total Army contributes to the whole, resulting in an interdependence of all components to form an Army which must be capable of performing its peacetime and wartime missions.

Army Reserve units constitute 34 percent of the Army's tactical support increment, 23 percent of general support force increment and 15 percent of the non-division combat and special theater force increment (Figure 1). In addition, the Individual Ready Reserve constitutes the essential mobilization pool, providing resources across the Total Army.

FIGURE 1

ARMY RESERVE TROOP PROGRAM UNIT CONTRIBUTION TO TOTAL ARMY WARTIME UNIT STRUCTURE



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Examples of the contribution of Army Reserve units to the Army's structure are indicated in Figure 2.

FIGURE 2

TYPE UNIT	% OF ARMY STRUCTURE*
TRAINING DIVISIONS	100%
TRAINING BRIGADES	100%
RAILWAY UNITS	100%
JUDGE ADVOCATE GENERAL UNITS	100%
CIVIL AFFAIRS UNITS	97%
PSYCHOLOGICAL OPERATIONS UNITS	89%
SMOKE GENERATION COMPANIES	85%
QM POL SUPPLY COMPANIES	78%
ARMY HOSPITALS (MTOE)	62%
TERMINAL SERVICE/TRANSFER COMPANIES	61%
SUPPLY AND SERVICES CAPABILITY	59%
QM POL OPERATING COMPANIES	56%
CONVENTIONAL AMMUNITION COMPANIES	51%
PATHFINDER UNITS	43%
WATERCRAFT UNITS	43%
CHEMICAL DECON COMPANIES/DETH	42%
MEDICAL UNITS (OTHER)**	39%
COMBAT SUPPORT AVIATION COMPANIES	38%
WATER SUPPLY, PURIFICATION, WELL DRILLING	37%
MAJOR LOGISTICAL UNITS***	35%
TRUCK COMPANIES	29%
COMBAT ENGINEER BATTALIONS	26%
SPECIAL FORCES GROUP	25%
NON-DIVISIONAL BRIDGE COMPANIES	24%
NON-DIVISIONAL MAINTENANCE (DS,GS)	21%
SEPARATE BRIGADES COMBAT	11%
FIELD ARTILLERY BRIGADE, HHD	9%
FIELD ARTILLERY BATTALIONS	8%
INFANTRY BATTALIONS**	7%
MECHANIZED INFANTRY BATTALIONS**	2%
TANK BATTALIONS**	2%

*Current structure as of January 1982.
**Includes organic and separate elements.
***TAACOM/COSCOM HHC and MMC.

As part of the Total Army, the Army Reserve must be ready to go to war--today and tomorrow. Readiness of individuals and units to perform wartime missions is required for readiness of the Total Army.

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Challenges still exist for the Army Reserve to achieve required readiness goals. But significant progress has been and is being made.

The Army Reserve consists of over 442,000 men and women. Members of Army Reserve troop program units number over 223,000. The others are members of the Individual Ready Reserve. To accomplish its peacetime mission of deterrence, the Total Army requires Army Reserve units that are ready, equipped and capable of performing wartime missions, and sufficient pretrained individual Reservists. Should deterrence fail, those units and individuals are required as part of the Total Army.

FY 83 BUDGET REQUEST

The FY 1983 budget request for Operation and Maintenance, Army Reserve is $686.4 million. This represents an increase of $27.4 million over the current FY 1982 level of $659.0 million. This increase will be addressed later in this statement in terms of Army budget objectives. Following is a display of the FY 1983 request by budget activity and program package compared to the FY 1981 and FY 1982 levels.

OPERATION AND MAINTENANCE, ARMY RESERVE

($ IN MILLIONS)

PROGRAM	FY 81	FY 82*	FY 83	CHANGE	PROGRAM GROWTH	COST GROWTH
BA1-TRAINING & ORGANIZATION OF MISSION FORCES	296.3	416.6	423.6	7.0	-21.5	28.5
BA2-DEPOT MAINTENANCE	5.7	8.5	7.7	-.8	- 1.5	.7
BA3-OTHER SUPPORT	218.7	233.9	255.1	21.2	8.9	12.3
COMMUNICATIONS	(10.4)	(10.7)	(11.5)	(.8)	(.2)	(.6)
BASE OPERATIONS	(148.7)	(151.9)	(161.8)	(9.9)	(2.3)	(7.6)
RECRUITING/ ADVERTISING	(32.7)	(40.0)	(44.6)	(4.6)	(2.3)	(2.3)
MANAGEMENT SUPPORT	(26.8)	(31.3)	(37.2)	(5.9)	(4.1)	(1.8)
TOTAL	520.7	659.0	686.4	27.4	-14.1	41.5

*Excludes FY 82 civilian pay raise

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The formulation of the FY 1983 budget request for Operation and Maintenance, Army Reserve was in conformance with and in support of the Total Army budget objectives. The major Army budget objectives are as follows:

FY 1983 ARMY BUDGET OBJECTIVES

> Within constrained fiscal guidance and given end strengths, this budget supports improvements in the following categories of the Total Army which will better ready it to fight today and tomorrow...
>
> - ORGANIZING THE FORCE
> - MANNING THE FORCE
> - EQUIPPING THE FORCE
> - TRAINING THE FORCE
> - MOBILIZING, DEPLOYING AND SUSTAINING THE FORCE

At this point the FY 1983 Operation and Maintenance, Army Reserve budget request will be discussed in terms related to the above objectives.

ORGANIZING THE FORCE

The 24 Division Force (16 active and 8 reserve component) is the basis for the force structure of the Army Reserve which includes the increments displayed in Figure 1. Within this structure, the Army Reserve continues to make internal improvements to better meet the current and projected threats which the Army might face. The FY 1983 budget request includes force structure changes designed to improve our capability to meet the threats. An increase of $6.4 million is requested to support these structure actions. Representative improvements are shown below:

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ARMY RESERVE FORCE STRUCTURE IMPROVEMENTS

FY 81 and FY 82
ACTUAL

NEW ACTIVATIONS

- 9 Nuclear, Biological, Chemical/ Smoke Companies
- 3 Engineer Bridge Companies
- 2 Medical Ambulance Companies
- 5 Adjutant General Battalions
- 5 Combat Electronic Warfare Intelligence Companies
- 2 Combat Electronic Warfare Intelligence Battalions
- 4 Military Police Companies

CONVERSIONS

- 7 Engineer Teams/Companies
- 2 Field Artillery Battalions
- 46 Dental Detachments
- 2 Cavalry Troops
- 2 Veterinary Detachments
- 2 Signal Battalions HHD
- 5 Maintenance Companies
- 2 Area Support Groups HHC

FY 83 and FY 84
PROGRAMMED

NEW ACTIVATIONS

- 8 Nuclear, Biological, Chemical/ Smoke Companies
- 4 Engineer Panel Bridge Companies
- 2 Medical Battalions
- 3 Hospitals
- 5 Adjutant General Battalions
- 5 Combat Electronic Warfare Intelligence Companies
- 3 Combat Electronic Warfare Intelligence Battalions
- 3 Medical Group
- 3 Ammunition Companies
- 2 Combat Electronic Warfare Intelligence Group

CONVERSIONS

- 2 Smoke Generating Companies
- 11 Hospitals
- 9 Veterinary Detachments
- 25 Ammunition Companies
- 12 Signal Companies
- 15 Adjutant General Companies
- 9 Maintenance Companies
- 5 Truck Companies
- 4 Military Intelligence Companies
- 7 Military Intelligence Detachments
- 2 Area Support Groups HHC

MANNING THE FORCE

Commencing in FY 79, the Army Reserve troop program units began a recovery from a precipitous strength decline in earlier years. Strength gains during fiscal years 1979, 1980, and 1981 were approximately 4,200, 12,600 and 17,500 respectively. This significant turnaround can in large part be attributed to improved retention in units as well as meeting recruiting objectives. For FY 1982 and FY 1983, increases of 14,900 and

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14,680 are respectively projected, bringing the paid drill strength at the end of the year to 251,680.

The Operation and Maintenance Army Reserve budget request for FY 1983 provides for support of recruiting activities at a level of $44.6 million. Included in this request is $3.3 million to support a new initiative aimed at improving the strength of the Individual Ready Reserve (IRR). This IRR direct enlistment program envisions recruiting approximately 5,000 individuals who will receive basic and advanced individual training then return home as mobilization assets in the IRR.

EQUIPPING THE FORCE

Equipment initiatives reflected in the FY 1983 budget request are aimed at both modernization and overcoming serious equipment shortages. In the area of modernization $13 million is requested to support 13 new equipment systems being introduced into Army Reserve units in FY 1983. Included in the modernization effort are such items as M60A3 tanks, UH-60 helicopters, lightweight company mortars, forklifts, semitrailers, tractor trucks, communications security equipment, and the Decentralized Automated Service Support System. The $13 million is required to provide repair parts and maintenance support for the new equipment. Funds in the amount of $6.4 million are requested to provide consumer funded equipment associated with force structure changes scheduled for implementation in FY 1983.

Over the years a serious shortage has developed in equipment required for the Army Reserve. With the support of Congress, major initiatives are underway to correct this problem. The Congress provided an additional $46 million in the FY 1982 Operation and Maintenance, Army Reserve appropriation for the purchase of equipment. This initiative is

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continued by the Army in the FY 1983 budget request. A total of approximately $220 million is budgeted for supplies and equipment. Of this total approximately $120 million represents resources applied to eliminating the shortages of those items purchased with Operation and Maintenance funds. With this level of resourcing the requirements for Rapid Deployment Force units, Rapid Reinforcement of NATO units, and most of the remaining D to D+30 units will have been satisfied. In addition, some critical items such as chemical defense equipment for later deploying/employing Army Reserve units will be purchased.

TRAINING THE FORCE

Training is an important element in the readiness equation. Effective mission-oriented training produces individuals and units capable of mobilizing and deploying in an expeditious and efficient manner and performing wartime missions. It also results in individual satisfaction leading to improved retention. Initiatives to provide more effective methods of unit and individual training are being implemented and expanded. Army Reserve units participate in various major joint training and readiness exercises side-by-side with their Active Component counterparts. This training constitutes some of the most effective mission-oriented training in which an Army Reserve unit can be engaged. These training exercises, such as REFORGER, LOGEX GALLANT EAGLE, and other Joint Readiness Exercises have included tactical deployment to overseas locations in some cases. The exercises afford Army Reserve units realistic training in performing their wartime mission. Additionally, they provide opportunities for Reserve units to test their mobilization plans and focus training on war missions.

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Deployment training is especially valuable in improving unit readiness. It allows Reserve units actually to deploy and perform missions expected of them in wartime. Through this program, Active and Reserve units train together in their wartime chain of command. As a result, the Reserve commander is better able to tailor a mission-oriented, year-around training program. In FY 83, the budget supports participation by elements of 175 units in this valuable training.

Another significant program initiated to improve force readiness is the CAPSTONE program developed by US Army Forces Command. Under the CAPSTONE program, every unit in the Army Reserve is being aligned for training and planning with units in the Active or Reserve Component with which it is likely to be deployed or support in wartime. This permits soldiers who may fight together to also train together and plan for mobilization. The result of these associations will be improved mobilization planning and execution, and identification of wartime training requirements. At present, CAPSTONE describes a specific NATO contingency mission and wartime organization for every unit in the total peacetime force. As a result, the entire chain of command will know where each Army Reserve unit fits in support of Army NATO contingency plans. The net effect will be enhanced readiness.

The Affiliation Program continues as a funded and directed program to improve the readiness of selected Reserve Component high priority combat and combat support units categorized as either deploying or essential nondeploying. Affiliation of Army Reserve to Active Component units permits command and staff interaction between Army Reserve units and Active Component Mobile Training Teams, joint Active and Reserve command and training exercises, and Reserve use of Active equipment and

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facilities for training. The FY 1983 budget request includes an increase of $3.8 million for the expansion of affiliation training and $11.5 million for other training expansion and improvement.

MOBILIZING, DEPLOYING, AND SUSTAINING THE FORCE

The capability of rapid and efficient mobilization of the Reserve Components is an important aspect of the Total Army. MOBEX 80, the most recent in a series of mobilization exercises, tested mobilization procedures and identified areas and issues for further review to enhance mobilization capabilities. One of the most serious deficiencies identified was the lack of automated systems and the incompatability of existing Reserve Component systems with Active Component systems. To overcome these deficiencies several major efforts are underway. The Mobilization Personnel System (MOBPERS), tested in MOBEX 80, is being improved. MOBPERS is a system that prepositions information at mobilization stations during peacetime. The data are used to determine the personnel status of Army Reserve units scheduled to mobilize at each station. MOBPERS also maintains current requirements for each unit to bring it to wartime strength by individual skill and grade, and identifies unit and Individual Ready Reserve skills that will be available at the station upon mobilization.

Development of a standard automated personnel system for the Army Reserve (SIDPERS-Army Reserve) and several support information systems are also underway. These systems will serve peacetime needs as well as provide required capacity to handle the massive data surge that will occur upon mobilization. The Continental Army Management Information System (CAMIS) is being designed to provide mobilization planning and

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implementation for the Reserve Forces in support of the mission assigned to the three Continental Armies and major Reserve Commands. It will provide timely and accurate information on personnel and logistical readiness at the execution level which is essential to mobilization of the Army Reserve. The system will provide information upon which to make decisions to improve readiness and to cross-level assets during mobilization. A total of $7.8 million is included in the FY 1983 budget request for these vital improvements in our ability to mobilize and deploy Army Reserve units.

Depot level equipment maintenance of Army Reserve equipment is a program critical to sustaining the force and maintenance readiness. The budget request includes $7.7 million for this program, primarily for aircraft and vehicle overhaul in FY 83.

CONCLUSION

Significant improvements have been realized in both the strength and readiness of the Army Reserve in recent years. Strength of the troop program units has continued to grow as the result of improved retention and recruiting. The monetary incentives as well as the dedicated officer and noncommissioned officer leadership throughout the entire Army Reserve chain of command have contributed to this growth. Initiatives are underway and planned to improve the equipment posture. The FY 1983 budget request of $686 million builds upon these accomplishments by further improving the ability of the Army Reserve to organize, man, equip, train and mobilize in support of our Nation's strategy of deterrence and to perform wartime missions if called upon.

We are confident that the programs requested in our FY 1983 budget will enable the Army Reserve to continue the momentum we have gained in the past few years. The units and individuals of the Total Army in the Army Reserve structure will continue to make progress toward readiness goals provided that sufficient and required resources for personnel, equipment, training opportunities, and facilities are made available.

Mr. Chairman, this concludes my statement. I am prepared to answer your questions.

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Senator **Humphrey**. Thank you, General Berkman.

General Walker, on page 14 of your submitted statement, the 1983 request is $1.12 billion, cost growth $64.2 million and negative program growth, $29.7 million.

NEGATIVE PROGRAM GROWTH

What does that mean, negative program growth?

General **Walker**. That is what I mentioned in that statement. We show a negative figure there, but most of it is because of special appropriations that you gave us last year.

Senator **Humphrey**. You mean that is a decline of $29.7 million the 1982 total O. & M. request appropriation?

General **Walker**. You recall you had some special O. & M. appropriations last year.

Senator **Humphrey**. Well, if you factor that special 1982 appropriation out, how do you fare in the 1983 request?

General **Walker**. Actually, sir, that is a negative growth for us of about $30 million.

Senator **Humphrey**. Even including the special item in 1982?

General **Walker**. I would have to exclude that and furnish that for the record for you. I do not have that factor here, but I will furnish it for you.

[The information follows:]

Excluding the $49.7 million fiscal year 1982 markup by the congressional committees for organized clothing and equipment results in a positive program growth of $25 million for fiscal year 1982 to fiscal year 1983.

Senator **Humphrey**. Where is that decline in the O. & M. going to hurt you? What part of your operations is going to take that?

General **Walker**. Well, what you did last year, you gave us a special appropriation. O. & M. appropriations of first of all, $34.75 million. Then you gave us an appropriation of $47.3 million. That was in organization clothing and equipment. Then we had the $50 million buy for major end items. That was a special procurement appropriation not O. & M.

The O. & M. account of $47.7 million, which I can tell you what we are going to buy with that if you need it, and that is the major area right there.

Senator **Humphrey**. You lost me in those figures. You are suffering a real decline in O. & M. in 1983.

General **Walker**. Yes, sir, $30 million. But we also have an addback, you see, of $21 million in support fielding new equipment, $12 million for maintenance and repair of training sites, and $14 million for additional equipment and supplies to support the mobilization and training, recruiting support and whatnot. I will have to come up with the difference and furnish that for the record for you.

We have increases in these three areas, but overall we have a $30 million decrease.

Senator **Humphrey**. What I am getting at is this. The argument is going to be that the Department of Defense is cutting O. & M. in order to fund procurement. I am trying to determine from the standpoint of your particular budget whether that is the case.

General **Walker**. I will have to furnish the figure and I would be happy to do that, to answer specifically the question you are getting at.

Senator **Humphrey**. What is the percent of wartime personnel strengths, or what will it be at the end of 1982?

General **Walker**. As of this morning it is 90 percent. At the end of 1982 I would suspect that it would be, sir, in the neighborhood of 92, 93 percent.

Senator **Humphrey**. What is the projection for 1983?

General **Walker**. Projection for 1983 is 417,000 paid drill strength.

Senator **Humphrey**. What would that be in percentage of wartime requirement?

General **Walker**. Rather than take your time, could I submit that for the record?

[The information follows:]

The ARNG is projected to achieve 417,000 paid strength by the end of fiscal year 1983. This figure is 93 percent of the wartime required strength of 448,000 for fiscal year 1983.

Senator **Humphrey**. Are you expecting an increase above the 93 percent that you project by the end of 1982?

General **Walker**. Yes, sir.

Senator **Humphrey**. You expect that to continue?

General **Walker**. Yes, sir.

MEDICAL PERSONNEL PROBLEMS

Senator **Humphrey**. All right. What about the problems in medical personnel?

General **Walker**. Today, sir, the main thing I will zero in right quick on is doctors. We have 50 percent of our doctors on hand.

Senator **Humphrey**. What will that be by the end of the year? Any improvement?

General **Walker**. Yes, sir, I certainly hope so because we have just fielded a recruiting force, 32 recruiters actually dedicated to the AMEDD field. I feel without a doubt that we will see increases in doctors. If you will take the 1979 base figure, we have shown a 21-percent increase over 1979. We think we are making real progress in the doctor area.

Now if you go to the other AMEDD specialists, we are over 100 percent in nurses, over 100 percent in veterinary, over 100 percent in medical specialist corps. The only three areas that we are under is doctors, physicians' assistants, and certain specialists. But really, other than those three, we are in good shape.

Senator **Humphrey**. What about the latter two? Are you making progress?

General **Walker**. Yes, sir.

Senator **Humphrey**. What kind of progress have you made?

General **Walker**. At the present time, on the physicians' assistants, we are authorized at the present time 260 and we have 156 assigned. Three years ago, we had zero. These improvements are because of the training program that we have developed wherein we actually send people through this training.

So I say we have made real progress there. The AMEDD specialists I mentioned present only a minor problem, we are only authorized 23 of them and I have 16 onboard.

Senator HUMPHREY. Let us go back to the physicians. They are our critical problem.

General WALKER. Yes, sir.

Senator HUMPHREY. You have more recruiters out so you have a game plan. What kind of goals have you set?

General WALKER. Well, I need about 1,235 and I have about 620 on board.

Senator HUMPHREY. What I mean is percentage of requirement. What are you shooting for by the end of 1982?

General WALKER. I do not have that goal. I am shooting for 100 percent of my doctors. Let me put it that way. I intend to make big progress toward that with this new recruiting force.

Senator HUMPHREY. We can expect to see substantially more than 50 percent next time?

General WALKER. You mark that down, sir.

Senator HUMPHREY. I will.

EQUIPMENT

How are you going to fare in the area of equipment this year? You are short $11.8 billion at the end of 1981.

General WALKER. That is right.

Senator HUMPHREY. That is the value of the total inventory. You are short $3.7 billion.

General WALKER. I prefer to really talk about percentages, sir.

Senator HUMPHREY. All right, whatever way.

General WALKER. About 70 percent of the wartime requirement. That is correct, sir.

Senator HUMPHREY. All right. What is the Army's plan? Are they going to let anything trickle down to you in 1983?

General WALKER. Yes, sir. Actually, we are supposed to get in 1983 approximately $129 million, and that is out of procurement. That does not include the trickle-down resources. Actually, over the last 5 years we have received from the Army some $400,000 worth of equipment, about a half a billion dollars, on the average, each year.

Senator HUMPHREY. Where are you going to stand on the percentage of wartime requirement at the end of 1982 and 1983?

General WALKER. I cannot tell you that exactly, sir, percentagewise. I can furnish it for you.

[The information follows:]

Presently, our on-hand equipment, constitutes of the ARNG wartime requirement. Based on projected issue of equipment in the Total Army Equipment Distribution Plan (TAEDP) for fiscal years 1982 and 1983 plus equipment scheduled for issue to the ARNG through modernization ($472 million), the percentage of equipment on hand will increase by 3.6. However, this increase does not consider any force structure changes.

Senator HUMPHREY. Well, I am trying to find out if we are making any real progress. Is it going to be substantially more at the end of 1982 than 1983?

General WALKER. Well, we think so, sir. You know, the Congress, asks the Army to furnish each year by the 15th of February a report of where we stand, what you gave the Reserve components last year, what you intend to give them this coming year. I think this report is going to be an effective tool for keeping tabs on what is happening.

To answer your question directly, yes, sir, we think we are going to make progress.

CHEMICAL WARFARE DEFENSE EQUIPMENT

Senator HUMPHREY. All right. When are we going to get better in the area of chemical warfare defense equipment?

General WALKER. Well, I intend to do quite a bit on that this year, sir. We are authorized for an inventory of about $104 million and I have about a $93 million shortage now.

This year, out of the money you gave us as the special O. & M. appropriation, I intend to put $13 million into chemical defense equipment.

At the present time, I have these categories of troops covered. I have all my RDF covered, and I have a training package in every unit out there.

Senator HUMPHREY. The RDF, and what was the second category?

General WALKER. Roundout and the D to D plus 30.

Senator HUMPHREY. D plus 30.

General WALKER. Yes, sir.

Senator HUMPHREY. Are any of those units in New Hampshire?

General WALKER. It will not take me long to find out.

Senator HUMPHREY. As I understood, there was not one soul in the whole Guard up there who had a complete ensemble.

In any case, how much are you adding in millions in 1983?

General WALKER. $13 million.

Senator HUMPHREY. That is not a very substantial increase. At present, you have 10 percent of your total requirement. What percentage increase will be added to that 10 with the $13 million procurement.

General WALKER. Well, I am short $93 million, sir, and I am going to put $13 million in.

Senator HUMPHREY. It seems to me that ought to be a very high priority item.

General WALKER. Well, it is a very, very high priority item, and I have some other high priority items that I must fund to go along with it like cold weather equipment and this type of thing. So I am trying to make progress where progress can be made. I have to agree with you. I have to agree with everything you are saying.

Senator HUMPHREY. What is the target date? By what date are we going to have our people equipped? We know darned well, in view of what is going on in Afghanistan, that that is going to be the environment. We do not know that it is going to be cold, but we know that they will use the bacterialogical or chemical weapons.

General WALKER. I am going to get that just as fast as I get the funds to get there, sir.

Senator HUMPHREY. That is what we are trying to find out, if you are getting enough money.

General **Walker**. Yes, sir. Well, if you would give me about $93 million, I could get well in chemical defense equipment.

Senator **Humphrey**. Well, we are also talking about priorities.

General **Walker**. Yes, sir, that is right. I am working, based on priorities.

Senator **Humphrey**. We are trying to determine if DOD has set the right priorities.

So what progress are you going to make? You only have 10 percent of the total requirement. How are we going to be at the end of 1982 and 1983?

General **Walker**. This $13 million will give me in the neighborhood of another 14-percent increase in chemical defense equipment.

Senator **Humphrey**. Bringing it up to 24; is that what you are saying?

General **Walker**. At the end of 1982.

Senator **Humphrey**. How about at the end of 1983?

General **Walker**. End of 1985 is the way we have it programed to have the whole force covered.

Senator **Humphrey**. Do you have the figures for the end of 1983? These outyear figures are so uncertain. Frankly, I cannot take much comfort in them.

General **Walker**. I will give it to you. Let me furnish what we have in the budget now programed.

[The information follows:]

The fiscal year 1983 ARNG Operation and Maintenance Budget identifies $13 million for the procurement of Chemical Defense Equipment (CDE). This will increase the ARNG on-hand assets to 34 percent of the total requirement.

Senator **Humphrey**. All right.

BMAR BACKLOG

BMAR backlog is growing; is that correct?

General **Walker**. That is correct. It is about $60 million now.

Senator **Humphrey**. Military construction backlog is growing?

General **Walker**. Yes, sir. That is about $800 million.

Senator **Humphrey**. That is not too impressive in those categories. In most military areas we are finally beginning to pare down military construction backlog and BMAR. Why is that not the case?

General **Walker**. Well, BMAR, sir, is in the Army's POM. We are programed to bring it down in the outyears of the POM, and we will reach that $150 million limit that you put on it in 1987.

Senator **Humphrey**. The problem is the goals of the outyears always seem to recede as fast as the years come along.

Maybe we might want to, speaking for myself—I cannot speak for the subcommittee—but we might want to make some adjustments in some of these figures.

Let us turn to General Berkman and the Reserves. Let us see. Your request is $686.4 million. Modest increase. Real buying power decrease.

How is that justified, a real decrease in O. & M. for the Reserves?

General **Berkman**. That is attributable to the same circumstances that General Walker was alluding to, and that is the significant increases in OMAR in the fiscal year 1982 budget and consequently the fiscal year 1983 program reflects what appears to be a reduction in program growth.

I might say that increases in fiscal year 1982 and 1983 are significant in that they will provide resourcing for that portion of the Army Reserve equipment that is funded by OMAR up to the level of about 86 percent of our peacetime requirement, leaving an unfunded requirement, against estimated peacetime authorization of $70 million. Those increases in fiscal year 1982 as well as fiscal year 1983 are going to readiness-related requirements, repair parts, and equipment that come from the stock fund, to include chemical defensive equipment, cold weather clothing and organizational clothing and equipment.

PERSONNEL

Senator **Humphrey**. All right. Where do we stand in personnel? How are you doing?

General **Berkman**. As of January 31, in the troop program units of the Army Reserve, the paid drill strength was approximately 225,000. This represents almost 87 percent of the fiscal year 1982 peacetime authorized strength and 79 percent of the wartime requirements. I estimate that by the end of fiscal year 1982 the paid drill strength will be 237,000. That is compared with a peacetime authorized of 264,000 and wartime requirement of 286,000.

So in fiscal year 1982 we will still be approximately 49,000 short of wartime requirements, but the trends are going up, and it is attributable to improved retention, as well as meeting recruiting goals. The strength gain is the result of a lot of things. Economics obviously is a factor, but there are other significant factors like the training satisfaction that is being obtained, the relationship to the Active Forces, and in the improvement in the equipment part of the equation.

Senator **Humphrey**. Good. I congratulate you and General Walker in making real progress in this area of personnel. But now that you have more souls on board, you are going to need more training money. How is the real decline in O. & M. going to affect training?

TRAINING

General **Berkman**. There are some increases in O. & M. to enhance training, to provide more resources for the affiliation program although the affiliation program does not cover the entire force. The budget for fiscal year 1983 will also enhance training participation in exercises, which are an important training vehicle.

I must say personally that I would like to have even greater participation in those major readiness exercises by the Army Reserve units, because of the training enhancement provided.

Senator **Humphrey**. You are saying that despite the decline in the O. & M. budget for the Reserves, that training currently has a higher priority within the budget. You are going to be a little bit better off in the area of training?

General **Berkman**. Yes, sir. There is training enhancement contained in the O. & M. budget request.

I might say that the Capstone relationship that you are familiar with that identifies Reserve units with active components and other Reserve component units and focuses on wartime missions is an important program from the training standpoint. The association of those units is also valuable during participation in exercises. All of those are very important. The full implementation of the Capstone program will require additional resources for that kind of training.

Senator **Humphrey**. I am trying to get a sense, General, of the overall situation. Are you going to be better off in the area of training?

General **Berkman**. We will be somewhat better off.

Senator **Humphrey**. Somewhat better off. Let me ask General Walker that same question. You face the same problem. You have more personnel.

General **Walker**. Well, I have in my 1983 budget approximately $40 million, somewhere between $38 and $40 million for training initiatives that we will put into effect in fiscal year 1983, providing we get this money.

For example, we need to put out there some close-in training areas where we can get these troops out of the office into the field doing their thing, not just during the summertime. We have a program to do that.

We have a program we call KPUP [key personnel upgrade program], wherein we will send a particular type sergeant, for example, to an Active Army unit to train side by side with them. We are even going to do some small unit training program like that.

So this we think is going to be a real initiative for us, and then some money in the Air Force staff training. You know, we do a lot of training but we have always got our staff out there supervising, which he is supposed to do, but we never have the chance to really train that staff as a staff. So that is what we are trying to do.

So we have about $40 million in those new initiatives in training.

General **Berkman**. Mr. Chairman, there are resources in our other appropriation, the Reserve personnel appropriation, that also fund school and special training, as well as training for the increased end strength that is projected.

Senator **Humphrey**. OK. Where are you going to have to cut? Obviously something is going to have to give here. You have fewer real dollars. Where are you hurting?

General **Berkman**. Well——

Senator **Humphrey**. Are you saying that essentially the elimination of special items in 1982?

General **Berkman**. It is principally attributable to that.

Senator **Humphrey**. Excluding special items, would you have real growth in 1983 or the same or would it decline?

General **Berkman**. There would be some growth in fiscal year 1983, excluding that increase in fiscal year 1982.

BMAR BACKLOG

Senator **Humphrey**. OK. What about the backlog of BMAR?

General **Berkman**. The 1983 budget request will reduce the BMAR to $54 million. Now that is still above the $49 million congressional containment level, and it is projected that the containment level will be reached in the outyears.

Senator **Humphrey**. Is there Reserve and Guard money in the 1982 supplemental?

General **Berkman**. I am not certain, Mr. Chairman.

Senator **Humphrey**. Do you know, General Walker?

General **Walker**. Not at this point, Mr. Chariman, but I think there is going to be. There is going to be a request for some.

Senator **Humphrey**. Let me ask General Price.

General **Price**. You have your pay raise in the supplemental, but I do not think you have it in the programs. Not in O. & M. Real property maintenance is all in the active O. & M. account.

Senator **Humphrey**. You would be surprised where you see some of it turn up.

OK, I just wanted to be sure about that.

MILCON BACKLOG

All right, what about backlog in Milcon? Do you have that?

General **Berkman**. Yes, there is a backlog in the BMAR I have indicated, and in military construction, there is a backlog figure that I would like to supply for the record.

Senator **Humphrey**. Is that a major factor in your operation?

General **Berkman**. Well, the facilities for the training of the reservists obviously is an important factor. Adequate facilities for their inactive duty training during the period that they are not participating in field exercises or annual training is important. Those facilities are an element of the readiness equation.

Senator **Humphrey**. Do you have figures? Can you give us an opinion on what the trend is in the backlog?

General **Berkman**. If I may provide that for the record, Mr. Chairman.

[The information follows:]

We expect the Reserve construction backlog to be $938 million at the start of fiscal year 1983. Discounting inflation, current projections show no increase in the size of the backlog through fiscal year 1985. At that time, the impact of planned force structure changes and the manning of this structure should begin to affect our construction requirements. In fiscal year 1983 dollars, the backlog is expected to increase by approximately $500 million over the next 5 or 6 years.

PROTECTIVE CHEMICAL APPAREL

Senator **Humphrey**. What is the situation in your command regarding protective chemical apparel?

General **Berkman**. As I indicated, a significant portion of those increases in fiscal year 1982 are going to chemical defensive equipment. We are estimating approximately $12 million of the total $102 million increase is going to chemical defensive equipment. This will provide that equipment for the Army Reserve units identified as a portion of the rapid deployment force. If you wish I could provide for the record some information about the number and types of those units.

It will also provide chemical defensive equipment for the other early deploying units, the D to D plus 30, and will be allocated on the basis of deployment priorities.

I cannot give you at this time a percentage of the force that will not have its chemical defensive equipment, but I can provide that information for the record.

Senator **Humphrey**. You state that you are assigning it on a priority basis. Do all of your RDF people have it?

General **Berkman**. The RDF people have it or will have it, as a result of the procurement that is planned.

Senator **Humphrey**. In 1983?

General **Berkman**. We expect that it will be in their hands, Mr. Chairman.

Senator **Humphrey**. What is the next category in the ranking of priorities? You have your RDF people first. What is the next group?

General **Berkman**. On the basis of deployability, the D to D plus 30, a significant portion of that force or all of that force should also have the chemical defensive equipment, and then down the line, based on deployability schedules.

Senator **Humphrey**. OK. You just said that all of them will have it. A significant number or all will have it by the end of 1983? Can you be more explicit? Does anyone have any information on that? Can you be more explicit?

General **Berkman**. I can try to get more specific information for the record.

[The information follows:]

Chemical Defensive Equipment

There is a recommendation in process from the U.S. Army Forces Command to expand the USAR portion of the RDF in fiscal year 1983. The USAR should complete readiness issues of chemical defensive equipment for the expanded RDF and all of the early deploying D to D plus 30 forces in fiscal year 1983.

Senator **Humphrey**. OK. I wish you would. I think that is important.

We will have some questions which we will submit in writing, and will ask you to respond within 15 days. Thank you very much, General Walker and General Berkman.

General **Berkman**. Thank you, Mr. Chairman.

General **Walker**. Thank you, Mr. Chairman.

Senator **Humphrey**. We welcome Adm. Frederick Palmer, Chief of Naval Reserve, and Maj. Gen. George Crist, Deputy Chief of Staff for Reserve Affairs, USMC.

Admiral Palmer, if you would proceed. I would appreciate it if you would summarize your statement.

STATEMENT OF REAR ADM. FREDERICK F. PALMER, CHIEF OF NAVAL RESERVE

Admiral **Palmer**. Thank you, Mr. Chairman.

I am pleased to appear before the subcommittee today to report on the status of the Navy Reserve. It is a distinct pleasure for me to be able to report continuing improvement. No small part of the credit for our progress is the interest and support provided by this subcommittee of the Congress.

We were able to maintain our Selected Reserve strength within one-half of 1 percent of our authorized level of 87,000. This stability enabled us to continue our program of increasing the match between specific billet requirements and the capabilities of the individual selected reservist.

Just 2 months ago, in January, we received the first two of our FF-1052 class frigates, one in Newport and one in Long Beach.

As a result of improved funding support, the Naval Reserve has achieved significant improvements in readiness. The Naval Reserve Construction Battalion unit readiness has made the most dramatic improvement. Other types of surface reserve hardware units are also on the upswing.

In the Air Reserve, readiness has remained relatively stable due mainly to equipment problems with both airframes and engines.

Considerable progress has also been made in improving the level of training in the Naval Reserve. During the last 16 months, we have constructed 14 shipboard simulators, constructed 5 damage control trainers, established 6 Naval Reserve maintenance activities, and added 12 LCM-8 landing craft in the Naval Reserve.

Our request for fiscal year 1983 highlights our phased growth and modernization which is essential to improve the Naval Reserve's ability to support an expanding U.S. Navy.

The NRF frigate program will continue its expansion to the level of six FF-1052 *Knox*-class frigates by the end of fiscal year 1983.

Replacement of the Naval Air Reserve C-118 aircraft is one of our highest priority items. The Navy has been examining alternatives to determine the least costly method of providing required mobilization airlift capability and support as well as necessasry Naval Reserve training. We are presently structuring a lease/purchase plan which will provide as many as 12 used DC-9 aircraft.

We are developing plans for a dramatic change in our carrier air wings. We are shifting from a vertical aircraft acquisition policy to one of horizontal integration of aircraft in the Navy Reserve. Eventually our goal is to have identical equipment, active, and reserve.

The funding requested for the Operation and Maintenance Naval Reserve appropriation for fiscal year 1983 is $653 million. This is an $81.9 million net increase over the fiscal year 1982 funding level and a real program growth of $64.8 million or about 10 percent. The difference is primarily due to increases for ship's maintenance incurred with the introduction of the new class frigates and overhaul of six additional ships over the fiscal year 1982 level.

We will not meet the BMAR congressional containment policy of no further growth above fiscal year 1978 year-end level with a backlog of nondeferable maintenance and repair. Accelerated deterioration of the physical plant will drive this backlog to a projected level of $38 million or about $17 million above the fiscal year 1978 containment level of $20.7 million.

In summary, during the past 4 years we have seen remarkable progress in the Navy Reserve. We have developed and implemented an integrated mobilization manpower requirements determination system which generates our Selected Reserve requirements.

We have greatly improved the quality of training through direct involvement of the active force command, in which the Individual Ready Reservist or Reserve unit would mobilize.

We have embarked on a growth and modernization program to increase our capability to support an expanding Navy. I am eager to respond to any questions or provide any additional information you might like.

[The prepared statement of Admiral Palmer follows:]

PREPARED STATEMENT OF REAR ADM. FREDERICK F. PALMER, USN, CHIEF OF NAVAL RESERVE

Mr. Chairman and members of the committee, it is my pleasure to appear before this committee today to describe the current status of the Naval Reserve and present our program for fiscal year 1983.

This is my fourth opportunity to report on the status of the Naval Reserve and it is a distinct pleasure to report continuing improvement. No small part of the credit for our progress is the interest and support provided by the Congress.

CURRENT STATUS

Improvements in the Naval Reserve cover the full spectrum of Selected Reserve strength, equipment modernization, readiness and training.

Selected Reserve strength

We were able to maintain our Selected Reserve strength within one half a percent of our authorized level of 87,000 and ended fiscal year 1981 with 87,599 personnel on board. This stability enabled us to continue our program of increasing the match between specific billet requirements and the capabilities of the individual Selected Reservist.

The first quarter of fiscal year 1982 has also been a period of stable strength for the Naval Reserve during which we achieved a major milestone with the endorsement of the Navy's Manpower Mobilization System (NAMMOS) in the report to the House Armed Services Committee by the Office of the Secretary of Defense. The approval of the Navy's mobilization manpower determination system has been essential to full acceptance of our stated Selected Reserve requirements.

Last November we instituted a 30-year career plan for Selected Reserve enlisted personnel, which will not only improve the career and promotion opportunities for mid-grade petty officers, but will also improve the vitality of the force.

Most significantly, we have started to increase our Selected Reserve strength to more closely match the increasing requirements generated by NAMMOS. At the end of December, I issued a challenge to our recruiting force to make a major effort to achieve the significant increase in strength funded by Congress for fiscal year 1982. I emphasized that we must have only quality accessions to meet approved billet requirements. We will maintain personnel quality and improve personnel readiness. A growth of seven thousand Selected Reservists by the end of this fiscal year will be a most difficult task. However, we will utilize all of our assets to achieve this goal.

NRF frigate program and operational control

On January 16th 1982, the first two FF-1052 class frigates were transferred into the Naval Reserve Force. The planned transfer of 24 modern frigates to the Naval Reserve Force is a major modernization effort. I have entered into written agreements with the type commanders which detail operational scheduling procedures for these ships. Careful planning has been completed to ensure the ships will be utilized to accomplish required training and qualifications of the ship and its Reserve crew. My representatives on both coasts are involved in the operational scheduling process on a continual basis and I have the final approval authority for the schedules. Additionally, a maintenance monitoring activity has been established at Chief of Naval Reserve headquarters to ensure that the maintenance of the frigates is kept up to fleet standards.

Improvements in readiness

As a result of improved funding support, the Naval Reserve has achieved significant improvements in readiness. Naval Reserve Construction Battalion unit readiness has made the most dramatic improvement. Other types of surface Reserve hardware units are also on the up-swing. Air Reserve Readiness has remained relatively stable due mainly to equipment problems with both airframes and engines. Augmenting and sustaining units throughout the Naval Reserve show a modest readiness increase due primarily to improvements in individual qualifications.

Improvements in training

Considerable progress has been made in improving the level of training in the Naval Surface Reserve. During the last 16 months, funding for training equipment has permitted the construction of 14 Shipboard Simulators (SBS) and 5 Damage Control Trainers (DCT); establishment of 6 Naval Reserve Maintenance Activities (NRMF); and the placement of 12 landing craft in the Naval Reserve. These trainers and equipment provide much needed hands-on training for units and personnel to maintain mobilization readiness qualifications. The most significant event in improving Naval Air Reserve training has been the assignment of limited numbers of Reserve air crews to fly fleet aircraft at Jacksonville, Fla. On the west coast a new initiative has Reserve flight crews training in USN Flight Simulators with flights in fleet aircraft planned for this year. Both of the progams are providing training on equipment not previously available to the Naval Air Reserve.

Mutual support

Our Mutual Support program, where direct assistance to the Navy in the performance of its peacetime mission is provided as an adjunct to mobilization training for the Naval Reservists, continues to expand. Some examples of this type of Reserve training are:

Reserve attack and fighter squadrons provide opposition forces for war-at-sea, fleet air defense, and air-to-air warfare exercises for workup training of deploying battle groups.

Reserve Transport (VR) squadrons are furnishing the entire CONUS fleet logistics support effort and are also augmenting the MED on a regular basis. Also C-9B's are deploying to WESTPAC to support the USS MIDWAY and Pathfinder (Tanspac) movements of Navy and Marine TACAIR squadrons.

Reserve VC squadrons presently provide 5,060 hours per year of target and Dissimilar Air Combat Training (DACT) services to fleet units.

During 1981, 11 Reserve VP Squadrons provided 4 aircrews and 3 aircraft for 22 weeks at Bermuda and Lajes and 20 weeks at Kadena to supplement fleet operations.

Naval Reserve Force (NRF) ships and special boat units are fully integrated into fleet exercises and underway training schedules. They also provide assets for special evolutions, such as the Surface Warfare Officers School ship and the annual Great Lakes Cruise.

SIMA/YR Reserve units have provided over 64,000 man-days in direct support of ship overhaul and rework projects at the Intermediate Maintenance Level activities.

Supply Systems Command units are assigned projects in stock control, warehousing, traffic management, stock purification, materials identification, and other areas covering the entire spectrum of the Naval Supply Systems Command's tasks and responsibilities.

Reserve Seabee support to active commands was in excess of 30,000 man-days last year.

Public Affairs units provided almost 1,000 man-days of support to active commands in all areas of public affair and public information. In addition, support was provided for the Great Lakes Cruise and the NATO Standing Naval Force visit to New York City in 1981.

FISCAL YEAR 1983 REQUEST

Our request for fiscal year 1983 marks the real beginning of our phased growth and modernization which is essential to improve the Naval Reserve's ability to support an expanding U.S. Navy. Just as the Naval Reserve was reduced in size at the same time as the active duty Navy during the seventies, the Naval Reserve must grow to meet its expanded responsibilities in the eighties.

Selected reserve strength

The average paid drill strength of 93,240 requested for fiscal year 1983 represents a significant increase over the authorization for fiscal year 1981, but is essentially the same as our anticipated end strength for fiscal year 1982. What appears to be a significant increase in the number of full-time active duty support personnel is the result of the transfer of the funding and accountablility of all the Navy's Training and Administration of Reserves (TAR) personnel (12,038 end strength) from the Military Personnel, Navy (MPN) to the Reserve Personnel, Navy (RPN) appropriation in fiscal year 1983. This action was the result of Congressional directive. There is some growth within the TAR program, approximately 600, as the result of the continuing expansion to support the new Naval Reserve Frigate Program. We are also continuing to expand our Individual Mobilization Augmentee (IMA) program with a planned growth from an average strength of 320 in fiscal year 1982 to 550 for fiscal year 1983 for those who will only be paid for 2 weeks annual active duty training (CAT D) and 500 in pay Category A. This growth marks the beginning of a new program to meet expanding medical support requirements. This combination of Selected Reserve unit strength (92,740), full-time active duty support personnel (12,038), and Individual Mobilization Augmentees (500 Category A and 550 Category D) results in a Total Paid Naval Reserve of 105,828 for fiscal year 1983.

Naval reserve force levels

The NRF Frigate program will continue its expansion to a level of six FF-1052 class frigates by the end of fiscal year 1983. Although two FRAM I Destroyers will remain in the NRF through fiscal year 1983, the only destroyer operating beyond fiscal year 1983 will be the USS *Edson*, a DD-931 class ship which is significantly newer and more combat capable than the destroyers we are decommissioning. A detailed plan outlining the further modernization of this increasingly important part of the NRF will be forwarded to Congress by April 1, 1982.

The four Amphibious Cargo Ships (LKA) assigned to the NRF are scheduled to be returned to the active forces during fiscal year 1983. This will improve the peacetime amphibious lift capability necessary to support the Navy's deployed forces.

Four of the Ocean Minesweepers (MSO's) assigned to the Naval Reserve Force are being retired during fiscal year 1983 due to their age and maintenance problems associated with their unique propulsion systems.

Replacement of the Naval Air Reserve's C-118 aircraft is one of our highest priorty items. The Navy has been examining alternatives to determine the least costly method of providing required mobilization airlift capability and support as well as necessary Naval Reserve training. We are presently investigating a lease/purchase plan which could provide as many as twelve used DC-9 aircraft by the end of fiscal year 1983.

The program to improve the capability of our Reserve patrol (VP) aircraft through the procurement of the Tactical/Navigational Modernization (TACNAVMOD) kits has been suspended for fiscal year 1983 as the result of fiscal constraints. The installation of kits procured during previous years continues and will provide a significant increase in capability to these aircraft. Thirty-five percent of Reserve VP aircraft are scheduled to have this fleet-compatible capability by the end of fiscal year 1983.

We are developing plans for a dramatic change in our Reserve Carrier Air Wings. The Navy is adopting a policy of horizontal integration of aircraft into the Naval Reserve where we will have a Reserve squadron for virtually all of our front line fleet aircraft. Discussions are focused on providing F/A-18, A-7E, and A-6E aircraft to the Naval Air Reserve as early as possible.

I strongly support this new philosophy of upgrading the capability of the Naval Air Reserve to make both the units and individuals better qualified and equipped to augment the fleet immediately upon mobilization.

Readiness initiatives

The fiscal year 1983 budget includes funding in three areas which will improve the readiness of all Reserve units: (1) increased formal school training that will enable Reservists to acquire critical skills needed upon mobilization; (2) additional Weekend Away Training (WET) to allow mobilization readiness training at active duty gaining commands; (3) additional Special Active Duty for Training including support for fleet exercises. This will improve unit individual readiness through integration with operating active duty ships and permit attainment of watch station qualifications.

Training initiatives

Three additional Shipboard Simulators and twelve additional Damage Control Trainers are included in the fiscal year 1983 budget request to make them more readily available to Reservists nationwide. Significantly improved training will be achieved by the increases in Weekend Away Training (WET) travel and per diem funding, additional funding for formal school tours, and sustained funding for participation in fleet exercises. Increases in funding of these three areas should produce dramatic improvements in both unit readiness and training quality.

The programed changes will result in a Naval Reserve at the end of fiscal year 1983 as outlined below:

Major commissioned units: 35 ships; 3 destroyers (DD), 6 Frigates (FF), 18 Minesweepers (MSO), 2 Tank Landing Ships (LST), 5 Fleet Ocean Tugs (ATF), 1 Salvage Ship (ARS).

Four special boat units (numerous craft), 16 mobile inshore undersea warfare (MIUW) units, 17 mobile construction battalions (MCB), 6 cargo handling battalions (CHB), 2 carrier air wings (CVWR).

Four fighter squadrons (VF), 6 attack squadrons (VA), 2 light photographic squadrons (VFP), 2 carrier airborne early warning squadrons (VAW), 2 tactical electronic warfare squadrons (VAQ), 2 aerial refueling squadrons (VAK), 2 patrol wings (RESPATWING).

Thirteen patrol squadrons (VP), 1 helicopter wing (HELWING RES), 4 helicopter antisubmarine squadrons (HS), 1 helicopter combat support squadron (HC), 2 helicopter attack (light) squadrons (HAL), 1 tactical support wing (RESTACSUPWING), 9 fleet logistic support squadrons (VR), 2 fleet composite squadrons (VC).

The Naval Selected Reserve also contains approximately 2,100 Reinforcing and Sustaining units organized and trained to provide support to the following programs:

Submarine Forces
Mine Forces
Mobile Logistics Support Forces
Surface Combatant Forces
Air Forces
Construction Forces
Amphibious Forces
Marine Corps
Special Warfare Forces
Major Fleet/Force Commands
Unified/Joint/Shore Commands
Support to Allies
Telecommunications
Security Group
Intelligence
Oceanography
Naval Control of Shipping
Research
Military Sealift
Bases and Stations
Naval Material Command
Air Systems
Electronics Systems
Facilities Engineering
Sea Systems
Civil Defense
Supply Systems
Merchant Marine
Medical
Training
Personnel System
Public Affairs
Law
Chaplain
Selective Service

Naval Reserve appropriations

The Naval Reserve is supported primarily by two appropriations; the Reserve Personnel, Navy (RPN) and the Operations and Maintenance Naval Reserve (O&MNR) appropriations. First, the Reserve Personnel, Navy appropriation.

Reserve personnel, Navy

The Reserve Personnel, Navy (RPN) appropriation is divided into two budget activities. Budget Activity One provides funding for Unit and Individual Training. Budget Activity Two provides funding for Other Training and Support including the active duty TAR personnel, Reserve Officer Candidate Program, Naval Reserve Officer Training Corps, Armed Forces Health Professions Scholarship Program, and the Navy Junior Reserve Officer Training Corps. The total fiscal year 1983 RPN appropriation request is for $641.3 million, which includes $330.6 million for Budget Activity One and $310.7 million for Budget Activity Two.

The funding request will support an average strength of 105,500 Reservists in paid status, including 11,500 active duty TAR personnel previously funded in the Military Personnel, Navy (MPN) appropriation. The Budget Activity Two request includes $238.4 million transferred from the MPN appropriation to support the cost of active duty TAR personnel. The Budget submission requests an increase of $24.0 million for program growth. This includes $9.5 million for full year funding of the 94,000 fiscal year 1982 end Strength (93,440 selected Reserve, 352 IMA's and 208 full-time active duty) which was incrementally funded (90,700 man year average) in fiscal year 1982. Cost escalation is $4.0 million.

Travel funding included in the fiscal year 1983 REPN request is all mission essential travel and is based upon actual costs experienced in fiscal year 1981 with a modest allowance for inflation. Barring cuts in the level of travel funding and unforeseen escalation in costs, the requested funding appears adequate to execute Naval Reserve Training programs for fiscal year 1983.

Operations and Maintenance, Navy Reserve

The other major appropriation which supports the Naval Reserve is the Operation and Maintenance, Navy Reserve (O&MNR) appropriation. The Naval Reserve is dependent upon funds in this appropriation for support of mission forces, depot level maintenance, and other support. This includes funds for fuel, intermediate maintenance, repair parts and related support for the operation of the aircraft in both the

Naval and Marine Corps Reserve; operating funds and maintenance for Naval Reserve ships; depot level maintenance, and rework of air craft, engines, and components for Naval Reserve activities under command of the Chief of Naval Reserve.

The funding requested for the O&MNR appropriation for fiscal year 1983 is $653.0 million which is a $81.9 million net increase over the fiscal year 1982 funding level of $571.1 million. The overall program reflects a real program growth of $64.8 million or 11.2 percent and a price growth of $17.1 million. Program growth is primarily for increases in Ship's Maintenance incurred with the introduction of the FF-1052 class frigates.

In addition, we will not be able to meet the Congressional Containment Policy of no further growth above the fiscal year 1978 year-end level of the backlog of nondeferrable Maintenance and Repair which was $20.7 million. Accelerated deterioration of the physical plant will drive our nondeferrable maintenance and repair backlog for fiscal year 1983 to a projected level of $38 million, or about $17 million above the containment level.

The NRF ship steaming time will remain virtually the same as in fiscal year 1981 and as originally planned for fiscal year 1982. While the Fleet Commanders-in-Chief consider 16 days steaming per quarter to be necessary for minimum required readiness, and 21 days to be optimum, funding has constrained steaming to 14 days per ship per quarter. Also, the fiscal year 1983 flying hour program is now at 83 percent of flight hour requirements. This posture is slightly below the historically funded 85 percent of Primary Mission Readiness (PMR) level.

SUMMARY

During the past 4 years we have seen remarkable progress in the Naval Reserve. Not only have the past proposals for reductions in Selected Reserve strength been revised and the on board strength stabilized permitting increases in quality, we have also made substantial improvements in readiness and mobilization capabilities.

The Navy has developed and implemented an integrated mobilization manpower requirements determination system (NAMMOS) which generates our Selected Reserve requirements. This system has just recently been endorsed by the Office of the Secretary of Defense. We have been able to use this period of stability in strength to organize our structure at the unit level and to steadily improve the match of individual Reservists and their qualifications with the specific requirements of their mobilization billet.

We have greatly improved the quality of training through direct involvement of the active force command to which the individual Reservist or Reserve unit would mobilize. This involvement of active force units in Reserve training has had the additional benefit of direct support to the fleet as a by-product of Reserve training. This Mutual Support program has been warmly received by both the active and Reserve forces.

The Naval Reserve has just embarked on a growth and modernization program to increase our capability to support an expanding Navy. We are: Increasing the number of qualified Selected Reservists; Modernizing and expanding our surface warfare capability with the NRF Frigate program; Actively seeking replacement aircraft for our C-118s; and Adopting a new policy of horizontal integration of our tactical air forces which will place new aircraft directly into the Naval Air Reserve.

The Naval Reserve is anxious to accept these new and challenging assignments.

Senator HUMPHREY. Thank you.

General Crist?

STATEMENT OF MAJ. GEN. GEORGE B. CRIST, DEPUTY CHIEF OF STAFF FOR RESERVE AFFAIRS, USMC

General CRIST. Good morning. I ask that my formal statement be placed in the record.

Mr. Chairman, 1981 was another great year. For the second straight year, Selected Reserve strength ended up over plan. Attrition continued to decline while retention went up. As strength went up, so did quality. More high school graduates, less mental group IV's.

Training was rigorous and vigorous. New management initiatives were introduced. Mobilization planning was intensified and accelerated.

But I must admit we also had problems. Personnel readiness continued to be degraded by skill shortages. Aviation readiness was limited by aging aircraft, shortfalls, incompatibility, and near obsolescence. Material readiness was plagued by serious shortages. And training readiness suffered from a backlog in home center construction funds.

It is obvious that we must pick up the cadence if the Marine Corps Reserve is to be a fully capable adjunct to the active forces. We must not rest on our laurels. Let us move to improve our readiness, modernize our forces and facilities, and, thanks in great part to Congressional backing, we are moving out to meet that challenge in 1982.

Thank you, Mr. Chairman.

[The prepared statement of General Crist follows:]

Statement of Maj. Gen. George B. Crist, U.S. Marine Corps, Deputy Chief of Staff for Reserve Affairs

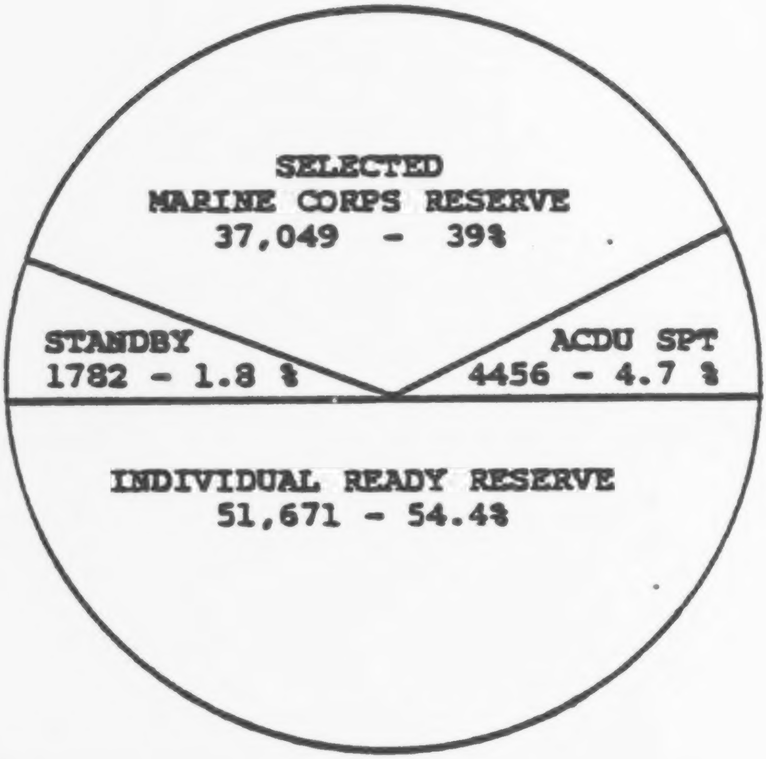
Mr. Chairman, distinguished members of the committee: It is a privilege to appear before this committee to present the annual report on the posture of the Marine Corps Reserve.

I am pleased to report that the posture of the Marine Corps Reserve is solid. We continue to show steady, demonstrable progress in almost every measured area. As satisfying as this situation is, the question must be asked, however, whether this is enough. With one-third of the available manpower and 25 percent of the structure, the Marine Corps must rely heavily on its Reserve Component to meet the totality of wartime and contingency requirements. This dependence in turn is generating a widening range of Reserve contingency missions within increasingly stringent response parameters. We believe the pace needs to be accelerated if the Reserve is to meet this new challenge. What was not possible prior to fiscal year 1981 is within the realm of achievability now. The administration has provided the impetus and Congress the priority and wherewithal. Fiscal year 1982 is the year of transition as the Marine Corps Reserve steps out smartly.

In this statement I have tried to lay out for you a map of the path we intend to travel—what has been accomplished to date—what we intend to do with your help—and what remains to be done.

ORGANIZATION

The rock upon which all our planning rests is the 94,958 active Marine Corps Reserve. It is composed of the Selected Marine Corps Reserve (SMCR), the Individual Ready Reserve (IRR), the Standby Reserve and full-time Reserve (FTS) and active duty personnel who will mobilize with the Reserve component.



Selected Marine Corps Reserve (SCMR)

The preponderance of the SMCR consists of the 4th Marine Division, the 4th Marine Aircraft Wing (MAW), and the 4th Force Service Support Group (FSSG).

Located in 45 states at 178 sites, the Division/Wing Team (DWT) is a balanced force of combat (35 percent), combat support (39 percent), combat service support (24 percent) and staff (2 percent). The population is similarly well balanced. The ratio of officers to enlisted is 1:14. Officers make up 7 percent of the population with 40 percent of the officers captains or below. On the enlisted side, 89 percent of the personnel are sergeants or below.

The remainder of the Selected Reserve consists of Individual Mobilization Augmentees (IMA) and full-time support personnel.

Individual Mobilization Augmentees are members of the Selected Marine Corps Reserve who are in a mandatory training status, but who are not members of Selected Reserve units. These are individuals who are preassigned to mobilization billets which must be filled on or shortly after M-Day and whose mobilization duties are of such a nature that the individuals must be available immediately upon mobilization. Mandatory training assemblies and annual active duty training are required. They will be issued mobilization orders which will be executed when authorized and directed.

Full time support is provided by a combination of reservists on active duty and regular personnel who assist in organizing, recruiting, administering, instructing, and training the Reserve Component.

Individual Ready Reserve

The IRR consists of members of the Ready Reserve not assigned to the Selected Reserve and not on active duty. These reservists may be mobilized: (1) to meet filler replacement requirements of active units or mobilized Reserve units, or; (2) to form new active units, or; (3) to replace combat losses.

A percentage of the IRR will be preassigned to designated wartime billets. The prerequisites for preassignment are that the individual can maintain the capability to immediately assume duties upon mobilization with little or no preparation other than periodic two wek annual refresher training and that the billet must be filled

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shortly after M-Day. Preassigned IRR's will be issued premobilization orders for execution upon statutory authorization.

Standby Reserve

The Standby reserve is divided into active and inactive categories.

The Active portion is composed of reservists who: (1) are completing their military obligation; (2) are being retained in an active status under Section 1006, title 10, U.S.C. (at least 18 years but less than 20 years of qualifying service for retirement), or; (3) are temporarily assigned to the Standby Reserve for hardship or other cogent reason with the expectation of being returned to the Ready Reserve.

Inactive Standby Reservists are members who are not required by law or regulation to remain as members of an active status program, but who: (1) desire to retain their Reserve affiliation in a nonparticipating status; (2) have skills which may be of possible future use to the Marine Corps; and (3) do not volunteer for assignment to, or having so volunteered have not been assigned to the Active Status List of the Standby Reserve.

MISSION

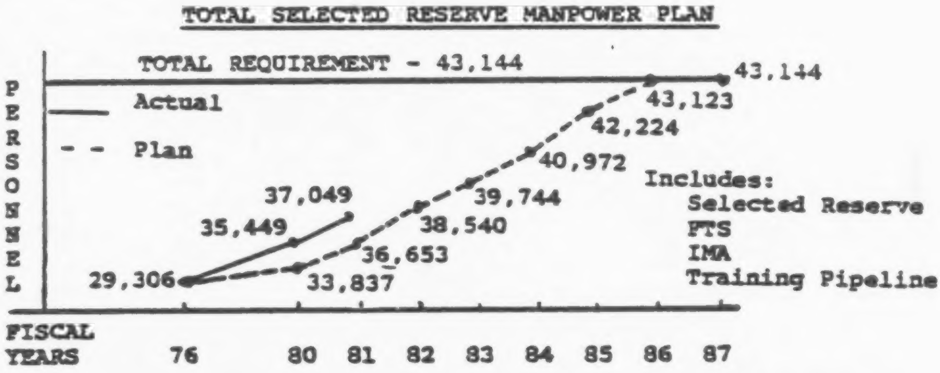
To support the assigned wartime and contingency roles and missions of the Marine Corps, the most probable employment roles for the Active Reserve will be as follows:

Selected Marine Corps Reserve.—Units of the SMCR will be utilized to: provide trained units to selectively augment and reinforce the active force in order to fill three Marine Amphibious Forces (MAF's) at full wartime structure; provide a Marine Amphibious Brigade (MAB) for independent deployment; and provide a nucleus for reconstitution of a fourth Division, Wing, and FSSG. If augmentation and reinforcement are not ordered, the Selected Reserve will generate a fourth Division/Wing Team. Individual Mobilization Augmentees will be utilized to provide trained individuals to fill key mobilization billets at M-Day.

Individual Ready Reserve (IRR) and Standby Reserve.—Members of the IRR and Standby Reserve will be the prime source to provide qualified individuals to fill shortfalls in active and Reserve units and expand the supporting base to meet wartime contingency requirements.

PERSONNEL READINESS

Selected Marine Corps Reserve (SMCR).—SMCR end strength has grown steadily since fiscal year 1976. By the end of fiscal year 1981 the strength had climbed to 37,049 (10 percent over the goal). The present plan is to achieve wartime strength by fiscal year 1986-87.



During fiscal year 1981 the Marine Corps Reserve was successful in improving the quality of the force as we increased the quantity. There was an 8 percent increase in the number of high school graduates recruited in fiscal year 1981 (84 percent for fiscal year 1981 versus 76 percent for fiscal year 1980). The Marine Corps Reserve population now contains 79 percent high school graduates overall (6 percent increase over fiscal year 1980) and 14 percent have two years of college or more. Mental Group IV comprised only 9 percent of the total SMCR population. In fiscal

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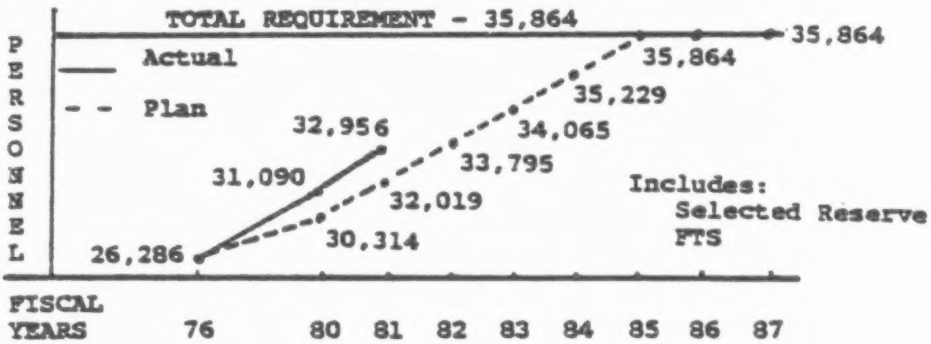
year 1981, non prior service (NPS) accessions in Mental Group II increased 9 percent and Mental Group IV accessions decreased 15 percent.

Minorities represent 21.8 percent (17 percent black). This is a decline of 1.9 percent from fiscal year 1980. Women comprise 3 percent; no appreciable change from fiscal year 1980.

Unit strength

Unit strengths increased 1,866 over fiscal year 1980. These improvements are due to an 18 percent decline in attrition since fiscal year 1975; increased first term retention (55 percent for fiscal year 1981 versus 52 percent in fiscal year 1980 and 9.1 percent in fiscal year 1975); increased career retention (94 percent for fiscal year 1981 versus 88 percent in fiscal year 1980); and reduced Initial Active Duty for Training (IADT) losses (5.6 percent in fiscal year 1981 as compared to 12 percent in fiscal year 1980; and 20 percent in fiscal year 1977). These positive trends are expected to continue in fiscal year 1982 and fiscal year 1983.

UNIT SELECTED RESERVE REQUIREMENT



Grade and skill shortages.—As unit strength increases, grade and skill shortages are emerging as major inhibitors to increased personnel readiness. For example, approximately 30 percent of the 4th Marine Division units are reporting degraded readiness for this reason. Some examples of areas experiencing the greatest shortfalls include Data Communications, NBC, Utilities, Electronics Maintenance, Aircraft Maintenance, Avionics, Aviation Ordnance and Air Control. The primary contributing factors to this disturbing problem are non prior service attrition and a continuing decline in the prior service population.

Nonprior service attrition.—Nonprior service attrition in fiscal year 1981 averaged 6.7 percent of the total Selected Reserve population. While this is down 5.6 percent for fiscal year 1981, it still represents an unacceptable loss of 2,489 trained individuals. Our studies indicate the primary causes for these losses are: lack of individual identity with the parent Reserve unit; employment and family conflicts; and lack of creativity and imagination in Inactive Duty Training.

Prior service decline.—There has been a 10 percent net decline in the unit prior service population over the past 4 years. Of these, 4.3 percent were lost to the IRR in fiscal year 1981. This represents an actual loss of 1,418 prior service reservists. If this negative trend continues, the prior service population is projected to decline by 27.2 percent through fiscal year 1983.

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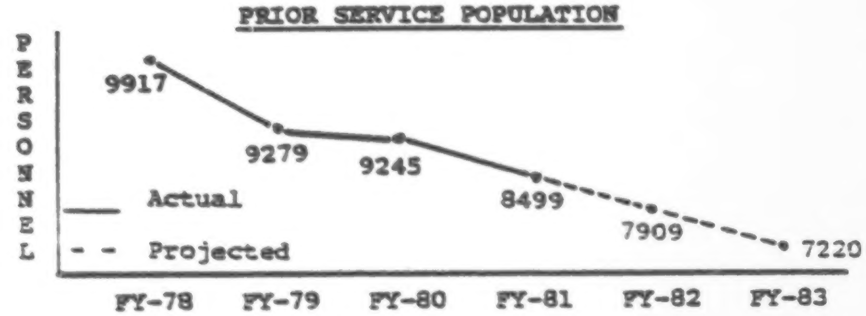

Initiatives.—The Marine Corps' goal is to increase end strength to wartime requirement, achieve the proper number and mix of grades and skills required for mobilization, improve retention, and improve the quality of the force. To ameliorate the skill shortages and achieve the goal of 100 percent wartime strength, a vigorous attrition management program will be instituted, bonus utilization maximized, recruit tracking improved, retraining opportunities expanded and a comprehensive prior service recruiting program inaugurated.

ATTRITION MANAGEMENT PROGRAM

Unit sponsorship program.—We have found that many of our non Expiration of Obligated Service (EOS) losses occur while individuals are undergoing IADT or shortly after returning to their home towns. To overcome this problem, a unit sponsorship program was introduced in fiscal year 1981. This program ensures communication between the unit and the individual during the entire period of IADT.

Revitalized unit retention program.—In years past SMCR units were directly responsible for recruiting prior service Marines. This detracted from the personnel retention efforts. Beginning in fiscal year 1982, units will no longer be solely responsible for recruiting prior service Marines and can now concentrate on retaining their quality Marines in units.

Recruit tracking improvement.—In fiscal year 1982 the Marine Corps Reserve instituted an Entry Level Tracking System designed to: (1) easily identify and monitor prior and non prior service file and recruiting requirements for the Selected Marine Corps Reserve (SMCR); (2) effectively plan and monitor the utilization of formal and informal schools to support SMCR non prior service training requirements; and (3) exercise central control over the assignment of military occupational specialities (MOS's) and school quotas to Reserve accessions. In fiscal year 1983 the system will be enhanced through automation. To humanize the system, selected Reserve full-time support personnel will be assigned to liaison duty at recruit depots and commands which provide entry level training to monitor, manage and track reservists on IADT.

Maximize bonus utilization.—The Marine Corps Reserve is presently 2,900 Selected Reservists short of the wartime requirement. Total manpower, however, only represents part of the equation. It is equally essential that the proper mix of skills and ranks be attained. Neither can be accomplished without a full range of incentives to recruit and retain the necessary Reserve manpower.

Education bonus.—Since the inception of this bonus in late fiscal year 1979, utilization has increased 300 percent. In fiscal year 1981 this bonus was over subscribed by 166 percent. Through the first quarter of fiscal year 1982, 303 Reserves have enlisted for this bonus; more than two and one half times the total usage in fiscal year 1981 (110). These dramatic increases are a direct result of the congressional action in fiscal year 1981 to increase the bonus from $2,000 to $4,000.

Enlistment bonus.—The performance has generally been disappointing. Fiscal year 1979, 113; fiscal year 1980, 88; fiscal year 1981, 174. Commencing in fiscal year 1982 we raised the maximum from $1,500 to $2,000. It could be made more attractive if reenlistment bonuses could be offered for either 3-, 4-, 5-, or 6-year enlistments as in the case of the active force.

Reenlistment bonus.—The reenlistment bonus is not working. Performance from fiscal year 1979 through fiscal year 1981 has been flat, achieving only 50 percent of the goal we had hoped to attain. Fiscal year 1979, 438; fiscal year 1980, 411; fiscal year 1981, 384. This poor performance is due to the fact that the dollar amount is

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insufficient. This is further exacerbated by the requirement to spread the payments out over the term of enlistment. For example, a reservist reenlisting for 6 years would receive a $900 initial payment and thereafter $150 a year for 6 years.

Expanded training opportunities.—Additional resources have been provided starting in fiscal year 1982 and fiscal year 1983, which will afford an individual the opportunity to retrain in a short occupational field or increase job satisfaction through skill progression training.

Prior service recruiting program.—We have relied on passive recruiting by Reserve units to attract prior service Marines and this approach has not worked. The decline in prior service strength is directly attributable to the lack of full-time, trained Reserve recruiters. A new prior service recruiting program has been inaugurated to solve this problem and ameliorate the skill and grade shortage problem.

The program has five major elements: centralized management; decentralized execution; a referral system; incentives; and a reporting feedback system. Management will be centered at the Marine Corps Reserve Support Center in Kansas City, Kansas. Decentralized execution will be accomplished by 184 full-time Reserve recruiters operating in 14 regions out of 39 separate locations. A multi-source overlapping referral system will generate the leads necessary to satisfy SMCR units' prior service grade and skill requirements. A closed cycle reporting and feedback system has been developed that provides a vehicle through which all echelons can monitor, manage and redirect or refine the program in order to meet annual goals.

Congress has provided two of the vital ingredients necessary for the success of the program, full-time Reserve recruiters and additional funds.

Individual mobilization augmentees

In fiscal year 1981, over 200 individual Selected Marine Corps Reserve personnel were assigned to and trained in the billets which they will fill on mobilization. We expect to preassign an additional 700 during fiscal year 1982. Each IMA will be required to participate in at least two weeks of Annual Training Duty. Most IMA's will be required to attend 12, 24, or 48 inactive duty training assemblies dependent upon the amount of additional training required in peacetime to ensure immediate and effective performance of duty when called to active duty. Individual Mobilization Augmentees are preassigned to such diverse and demanding billets as Fleet Marine Force staffs, Marine Corps Bases and Air Stations, mobilization processing facilities, major headquarters, the Selective Service, other service and joint activities, and Defense agencies.

Individual Ready Reserve (IRR)

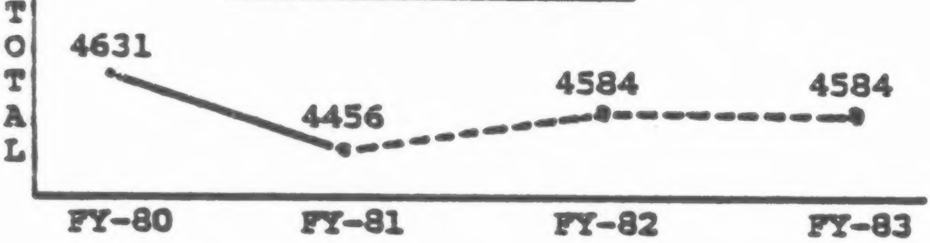
The Marine Corps goal for the IRR is to have sufficient pretrained personnel to fill 100 percent of the time-phased wartime requirement. The fiscal year 1981 end strength of 51,222 exceeds the M-Day to M+30 aggregate mobilization fill requirements. Minimal skill degradation has occurred since over 50 percent of the IRR have been off of active duty less than one year. The greatest demand for individual fillers upon mobilization will be in the ranks of captain and below, and sergeant and below. Sixty-one percent of the officers are captains and below while 97.3 percent of the enlisted are sergeants and below.

While the overall picture is generally healthy, the IRR population has declined 13 percent in the last three years. This is exacerbated by a shortfall of approximately 4,500 primary skills needed to meet the wartime requirement within some 35 critical military occupational specialties (MOS's). Areas where the greatest shortages exist include Data Communications, Transportation, Data Systems, NBC, Military Police, Electronic Maintenance, Aviation Ordnance and Air Control. Reinstatement of the IRR reenlistment bonus is needed to provide the essential monetary incentive to retain those critical mobilization skills which otherwise would be lost. In fiscal year 1981 the IRR reenlistment bonus achieved 210 percent of the original goal. Through this program, 1,051 reservists were retained in the IRR in a 6-month period.

Active duty support personnel.—The Marine Corps' goal is to provide adequate numbers of full-time support personnel to assist in organization, administering, recruiting, instructing, and training the Reserve component in order to sustain mobilization readiness, modernization, and expansion.

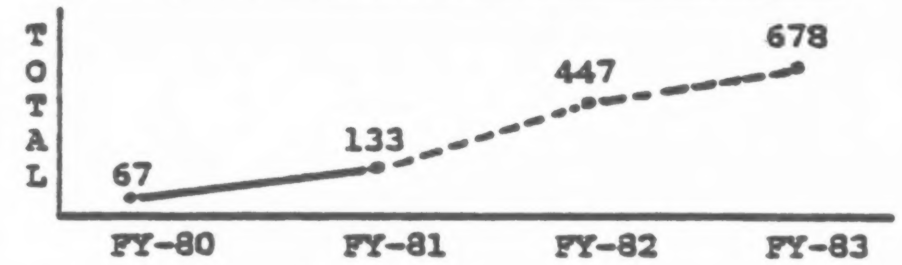
Active duty personnel will be assigned in the numbers which will ensure a continual infusion of active force experience and expertise into the Reserve, while fostering an understanding of Reserve capabilities and employment potential within the active component. The fiscal year 1983-87 program includes increases in the number of Active Duty Support personnel to accommodate the planned growth in the Selected Marine Corps Reserve.

ACTIVE DUTY SUPPORT



Reserve full-time support personnel on active duty will be increased to the levels and ranks necessary to satisfy requirements which would otherwise have to be met by active duty full-time support. The fiscal year 1983 program increases the number of Reserve full-time support personnel to accommodate the growth of the SMCR Division, Wing, and Force Service Support Group.

FULL-TIME ACTIVE DUTY RESERVE SUPPORT



TRAINING READINESS

To improve readiness, the exercise program is being expanded in fiscal year 1982. More mission oriented training will be conducted away from home centers and a greater number of units will undergo readiness testing. Increased emphasis will be placed on the integration of Reserve units into active unit schedules on a year-round basis. The mobilization readiness of individual reservists will be improved by: (1) placement of training emphasis on preassigned key mobilization manpower; (2) training individuals to meet mobilization requirements; and (3) training with Regular counterparts.

To attain these goals, exercise funding was increased in fiscal year 1982 and increased funding is again requested in fiscal year 1983.

Selected Marine Corps Reserve units.—Training readiness gauges the capability of our reserve units to mobilize and execute assigned contingency missions. The goal is to train the Reserve component in peacetime to operate as an integral part of the Total Force in wartime. Readiness is evaluated through the Marine Corps Combat Readiness Evaluation System (MCCRES), Mobilization Operational Readiness Deployment Tests (MORDT's), Inactive Duty Training, and field exercises.

Marine Corps combat readiness evaluation system.—Using the same standards as applied to like active units, MCCRES offers a dynamic vehicle to measure unit readiness through evaluation of actual performance under realistic conditions. In fiscal year 1981, 7 of the 13 units tested were fully combat ready. Aviation units scored best, with 86 percent combat ready. Ground units continued to need improvement in command and control and fire support coordination at the battalion level. This problem is exacerbated by the geographical dispersion of the units. In fiscal year 1983 the number of units to be tested will increase 184 percent.

Mobilization operational readiness deployment tests.—MORDT's provide a measurable indicator of SMCR unit mobilization response through evaluation of those actions essential to the mobilization process. This includes testing the units' administration, logistic readiness, and emergency recall and embarkation procedures. In

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fiscal year 1981 95 units were tested. Of these, over 80 percent were rated substantially ready or better. The goal is to increases the percentage of units tested each year. For fiscal year 1982 there will be a 50-percent increase over fiscal year 1981.

Inactive duty training.—Our objective is to increase mission oriented training conducted in realistic environments away from Reserve training centers. In fiscal year 1981 215 units conducted weekend away training. In keeping with the objective, a 35-percent increase is planned for fiscal year 1982.

Field exercises.—Field exercises afford a less structured medium through which readiness can be evaluated. The tempo of exercises seen in fiscal year 1980 continued through fiscal year 1981. Nearly 15,000 reservists participated in field exercises which were longer than a weekend in duration. Of these, 9 were major combined, joint or service exercises involving some 11,630 Marine reservists. In furtherance of the goal to integrate Reserve units with the active forces, 21 Reserve units were assimilated into regular organizations during 3 exercises. This level of activity will continue in fiscal year 1982.

Individual Ready Reserve (IRR)

Reserve counterpart training (RCT).—The RCT program allows members of the Individual Ready Reserve to voluntarily participate in a two week program of active duty to enhance and refresh their military skills by training alongside their active duty counterparts. Besides benefiting reservists with "hands on" training, this program provides a source of replacements for temporary personnel shortages in active force commands.

Individual Ready Reservists have thus far participated in Rapid Deployment Joint Task Force exercises with the 1st Marine Amphibious Force, III Marine Amphibious Force exercises in Korea, desert firing exercises at the Marine Corps Air Ground Combat Center, and a Joint Chiefs of Staff mobilization exercise. In all, a total of 1,543 Individual Ready Reservists received refresher training through this program in fiscal year 1981.

In fiscal year 1982 approximately 1,075 officers and 500 enlisted Reserves will participate in the RCT program. This represents a 2-percent increase over 1981. The excellent show rate of participating reservists and the praise of host commanders are strong testimony to the effectiveness of the program.

Preassigned Individual Ready Reservists.—As a result of a recent congressional decision which permits the Military Services the use of involuntary training for IRR members, the Marine Corps plans to order to active duty for training those IRR members preassigned to critical mobilization billets requiring fill in the first 30 days of mobilization and who possess MOS's requiring refresher training. Involuntary training will be ordered only when it is possible to insure that appropriate skill refresher training will take place.

MATERIEL READINESS

A critical element in the ability of the Reserve to execute assigned missions upon mobilization is the materiel readiness of the SMCR units. While the Reserve has improved in other readiness areas over the past year, materiel readiness remains an area of major concern.

Ground equipment

At the end of fiscal year 1981 the shortfall in ground equipment for the 4th Division/Wing team was $546.2 million.

Ground shortages

Commodity items:	*Millions*
Comm/elect	$92.6
Engineer	106.2
Motor transport	127.8
Ordnance	145.9
General supply	73.7
Total	546.2

Total equipment requirements are determined by aggregating the authorized Tables of Equipment (T/E) for each unit in the 4th Marine Division, 4th Marine Aircraft Wing and the 4th Force Service Support Group. The Reserve T/E's are the same as for like active units.

Of the total equipment authorized, approximately 45 percent is held by the units as a Training Allowance (T/A). The T/A is established as a function of the amount of equipment which can be satisfactorily stored and maintained at the training centers while at the same time fully satisfying the training needs of the units concerned. Thus, the actual T/A, as a percentage of T/E, will vary by unit. Unit T/A equipment is essentially compatible with that being used by the active forces.

The remainder of the Reserve T/E is programed to be held in a protected status in the stores system at the Marine Corps Logistics Bases, Albany, Georgia and Barstow, California. Upon mobilization, equipment held in the stores system is to be shipped to the units' Stations of Initial Assignment (SIA).

As a result of funding shortfalls in previous years, the Marine Corps' protected stocks are not adequate to satisfy total Marine Corps equipment requirements. This shortfall was exacerbated by the Enhanced Near Term Prepositioning Ships (ENTPS) program which caused a 10–12 percent reduction in equipment available for issue to the Reserve.

Increased fiscal year 1982 procurement funds have been directed toward reducing these shortages. If the present programed funding levels remain intact during the period, the shortages will be reduced to $135.3 million by the end of fiscal year 1987.

FISCAL YEARS 1982–87 EQUIPMENT SHORTAGES

[In millions of dollars]

	Fiscal year—					
	1982	1983	1984	1985	1986	1987
Comm/elect	86.2	82.1	77.5	20.9	18.0	5.7
Engineer	98.9	93.8	91.5	65.2	28.5	7.7
Motor transport	127.6	127.1	126.5	115.9	104.3	[1] 54.3
Ordnance	144.4	139.4	32.4	29.2	27.0	3.9
General supply	73.7	73.7	73.2	69.1	67.6	[2] 63.7
Total	530.8	516.1	401.1	300.3	245.4	[3] 135.3

[1] New start (fiscal year 1982) 900 series trucks ($53.7 million).

[2] New start (fiscal year 1982) shelter program ($56.5 million).

[3] Of the $135.3 million shortage that will exist in fiscal year 1987, over $110 million is for motor tranport items and shelters being purchased for the active forces beginning in fiscal year 1982.

Secondary items

Significant deficiencies also exist in secondary item support for Reserve forces. Secondary items include consumables (non-depot reparables, repair parts, 782 gear, etc.) and depot reparables (engines, transmissions, final drives, etc.).

FISCAL YEARS 1981–87 SECONDARY SHORTAGES

[In millions of dollars]

	Fiscal year			
	1981	1982	1983	1984
Consumables	86.5	73.2	46.9	[1] 46.9
Depot reparables	51.5	49.5	49.5	[1] 49.5
Total	138.0	122.7	96.4	96.4

[1] Program initiatives are being considered to further reduce this deficiency.

Navy funded stocks.—Medical, dental and aviation support for the SMCR if provided from the Navy War Reserve Program (NAVWRP). The stockage objective is 60 days of supply. Serious shortages exist due to low priority of funding. Deficiencies of $36.0 million exist in aviation items, and $6.8 million in medical and dental items.

MODERNIZATION

Commencing in fiscal year 1983 we intend to embark on an extensive, phased 7-year modernization plan to restructure and equip the ground, combat service support, and aviation elements in order to provide those capabilities and functions needed to satisfy full wartime requirements.

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Ground combat forces

The ground forces will be streamlined by reducing infantry strength while increasing firepower and reinforcing elements.

Commencing in 1982, the infantry battalion structure will be aligned with that of the active forces and reduced in manpower from 1,144 to 897. The structure will be realigned to match actural numbers of reservists at specific locations. This will afford a closer match of structure to personnel on hand, and should increase personnel readiness while accommodating the unequal geographic dispersion of Marine reservists.

Infantry firepower will be increased with the introduction of the following new weapons systems during fiscal year 1982 through fiscal year 1987; the MK19 heavy machine gun; the shoulder launched multi-purpose assault weapon (SMAW); the high mobility multi-wheeled vehicle (HMMWV); and the lightweight 60mm mortar. Introduction of the M198 howitzer is anticipated.

The following organizations, needed to deploy three active MAF's at wartime strength but which cannot be programed into the active forces, are planned for addition during the mid-1980's (Funding permitting): Force Reconnaissance Company (154 billets); Civil Affairs Group (194 billets); Special Security Communications Team (7 billets); Air Naval Gunfire Liaison Company (343 billets); Sensor Control and Management Platoon (46 billets); TOW Platoons (318 billets); Target Acquisition Battery (179 billets).

Starting in fiscal year 1984 a Reserve Marine Amphibious Brigade (MAB) Headquarters will be structured and manned in order to provide additional contingency flexibility to accommodate a separate MAB deployment or to act as the basis for expansion to a fourth MAF headquarters.

Combat service support forces

During the 1980's, a 56-percent expansion is planned for the 4th Force Service Support Group. This will structure, man and equip the 4th FSSG to optimally reinforce and augment the active FSSG's to satisfy surge requirements, enhance sustainability and provide combat service support to a separate MAB or a Reserve Division/Wing Team if augmentation and reinforcement are not ordered. The expansion will be undertaken in two phases.

Phase I (fiscal years 1981-83).—Build the six existing battalions to wartime structure by activating contingency billets and reactivating cadred units to include the Medical and Dental Battalions (1,907 billets).

Phase II (fiscal years 1982-86).—Plan to add two Bulk Fuel companies, a Beach and Port Operations company, an MP Company and various platoon size units (1,883 billets). This new structure is required to deploy the active FSSG's at full wartime strength, but cannot be programed into the active forces.

Medical support forces

A major initiative being undertaken in coordination with the Navy is the activation, manning, and equipping of the 4th Medical and Dental Battalions in order to reinforce the active MAFs, provide a surge capability, and support the Reserve MAB. This significant effort will take several years to bring to fruition, entailing close collaboration between the Navy and Marine Reserve to make it work.

An essential complement is the provision of adequate medical support to the combat and combat support elements of the 4th Division and Wing. To insure Reserve units are prepared to mobilize with their organic medical personnel, Navy Reserve personnel will be assigned to billets within the 4th Division and Wing and Navy Reserve participation in Marine Reserve unit inactive duty training and annual training will be increased.

Aviation forces

Currently, the 4th Marine Aircraft Wing is limited in its capability to augment and reinforce the active forces with modern aircraft due to: aging aircraft, shortages, incompatibility between active and Reserve aircraft and block obsolescence.

Aging aircraft

The SMCR aircraft inventory consists of attack aircraft that are 14 to 17 years average age, fighters that average 16 years of age, and transport helicopters that average 14 years of age.

Aging aircraft require increased maintenance time. A comparison of the average number of Direct Maintenance Man Hours required per flight hour is shown below:

Fleetwide
A-4M, 23.8
CH-53D, 35.9
AH-1T, 23.5
4th MAW
A-4E, 42.9
OV-10D, 16.6
KC-130R, 14.9
OV-10A, 43.0
KC-130F, 51.6
CH-53A, 41.9
AH-1J, 49-0

Aircraft Shortage.—The age problem is further aggravated by lack of aircraft in certain mission areas.

Type:	*Shortage*
KC-130	7
C-12B	1
AH-1J	17
OV-10A	3
CH-53A	2

Incompatibility between Active and Reserve Aircraft.—SMCR F-4 fighter and A-4 attack aircraft will be incompatible with active forces upon introduction of F-18 and AV-8B in the mid-to-late 1980's.

Fiscal years 1982-85, Active: F-4S, A-4M; Reserve: F-4N, A-4E/F.

Fiscal years 1985-90, Active: F-18, AV-8B; Reserve: F-4S, A-4M.

Block obsolescence of aircraft.—Marine Reserve aviation faces mid-range and long-range problems of block obsolescence with its aircraft: Force levels of F-4S and A-4M aircraft cannot be maintained past 1990 and 1992, due to normal attrition; Service life for the OV-10 expires in 1987; CH-46 and CH-53A service life expires in 1993-95.

Modernization program.—The Marine Corps has developed a long range modernization plan to upgrade the capabilities of the 4th MAW. The achievability of this plan is directly dependent upon the availability of necessary funding and the ability to recruit skilled Reserve full-time support personnel.

Transport aircraft

The Marine Corps is deficient in KC-130 aerial refueler/intra-theater transport aircraft.

Requirement: 10 squadrons; Current: 4 squadrons, (3 Active), (1 Reserve); Short: 6 squadrons.

Recognizing this deficiency, Congress directed the Department of the Navy to begin a phased program to complete the squadron at Glenview, Illinois and begin a second squadron. Expedited procurement of KC-130 aircraft for the Reserve was also directed. With the addition of the 4 KC-130's appropriated in fiscal year 1982, the shortage in the current squadron will be reduced to three. Funding to build a second squadron could not be accommodated in the fiscal year 1983 budget. This leaves a total of 17 KC-130s which must be procured to fill the congressional mandate.

Helicopters

Attack helicopters—There is a Marine Corps wide critical shortage in AH-1 attack helicopters.

Requirement: 15 squadrons; *Current:* 4 squadrons (3 Active), (1 Reserve); *Short:* 11 squadrons.

The Reserve squadron only possesses 8 of the 24 aircraft authorized. Present plans look toward transferring 16 AH-1J aircraft from the active forces beginning in fiscal year 1986 in order to bring the Reserve squadron to its authorized strength. While this improves the numbers, it does not lessen the aging problem.

The urgent need is to increase the helicopter anti-armor capability to counter large numbers of mechanized and armored units which will be encountered on a high threat battlefield. Only the AH-1T (TOW) has an anti-tank capability. This is an ideal mission for the Reserve as the manpower, airfield, and support facilities are available and the AH-1T requires 50 percent less maintenance than the AH-1J. The goal is to add one AH-1T squadron (24 aircraft) to the Reserve structure (tentatively planned to be based at Atlanta). Fiscal year 1985 is the earliest this initiative could be considered due to funding priorities.

Transport helicopters.—In fiscal year 1982 and fiscal year 1983, 6 CH-46 and 4 CH-53 aircraft will be transferred from the active forces. This will bring the two CH-46 squadrons to authorized strength and increase the CH-53 authorized strength to 22 aircraft.

Attack aircraft

The present plan is to replace the A-4E/F with the more capable active force A-4M beginning in 1987. This may be expedited if the active force conversion from A-4 to AV-8B is accelerated. If this occurs, the Reserve attack squadrons may be assigned the "real world" CINC commitments as the active squadrons stand down and convert. The ultimate goal is to replace the A-4 with the AV-8B, in order to achieve compatibility with the active forces. An interim solution is to activate an AV-8C squadron within the Reserve some time in the fiscal year 1988 time frame, pending resolution of the introduction of the AV-8B into the Reserve force.

Fighter aircraft

The two Marine Corps Reserve F-4N squadrons will begin conversion to the F-4S beginning in 1985, concurrent with the active force conversion to the F-18. In keeping with total force employment, the Reserve squadrons will probably be employed to cover active force contingency commitments during the F-18 transition. With the completion of the conversion of the active force into the F-18, programing will commence to acquire the F-18 for the Reserve force.

MOBILIZATION

A strategy which stresses the importance of improving plans and capabilities to respond to world wide crisis situations, demands an equally responsive mobilization process. Our earlier mobilization planning did not fulfill the goal, so about a year and a half ago, we started working to review, refine and update the mobilization process. Progress has been made, but much more remains to be done.

Management.—A first step was to form an inter-staff mobilization committee within the Headquarters to coordinate all aspects of mobilization planning and to oversee testing and evaluation.

Unit mobilization.—In response to the refinement of unified command operations plans, the process of selecting specific Reserve units to respond to CINC requirements is underway. This is a change from former procedure which was to identify national units shortly prior to or on M-day.

We have determined that the procedures which must be followed to mobilize units require review, testing, validation and modification. Including are warning orders, mobilization orders, transfer of personnel to active status, pay procedures, dependent care, movement of personnel and equipment to assigned Stations of Initial Assignment (SIA's), and the integration of mobilized units into the active structure. Many of the new procedures, which can be adopted unilaterally, will be institutionalized by fiscal year 1983.

A more pressing joint service problem is the refinement of a coordinating mechanism which will permit the services to simultaneously move their Reserve units and associated equipment under conditions of large scale mobilization.

Individual mobilization.—Of equal importance is the assurance that qualified individuals are available to fill vacant billets at the time and place needed. Our approach will be directed toward preassignment, simplifying call-up procedures and streamlining of individual processing.

Preassignment.—Pretrained individual reservists are being selected and preassigned as Mobilization Designees (MobDes) in critical billets which must be filled between M-Day and M+10. These MobDes personnel will be trained in peacetime to insure their availability to fill these billets without post-mobilization training. By the end of fiscal year 1983, the Marine Corps will have identified approximately 75 percent of these billets.

Simplifying call up procedures.—Approximately 90 percent of the individual Reserve population will remain unassigned. The assignment of these personnel upon mobilization will be scenario dependent, but their call-up, when required, must be accomplished in an expeditious manner using mailgrams. To insure prompt notification, appropriate authorization is needed which will require Western Union and the U.S. Postal Service to handle military mailgrams on a priority basis during mobilization. Regulatory authority is also needed to require commercial carriers to honor travel warrants included in mailgrams. We are working with the Department of Defense on these issues.

Streamlining individual processing.—Fifty Mobilization Stations, manned by preassigned mobilization designees, will process individual reservists and retired personnel upon mobilization and prior to their assignment to active duty. Mobilization Processing Centers (MPC's) at each SIA will assign incoming individuals (IRR, Standby, FMCR and retirees) to their new commands and provide the coordination/liaison necessary to facilitate the arrival of SMCR units and their associated equipment.

FACILITIES

There is is a pressing need to replace, renovate or upgrade 87 training centers in order to afford an acceptable training and habitability standard for the Reserve. Unless the present rate of replacement is accelerated, some of these centers will be in use well into the next century.

The opportunity to replace inadequate Marine Corps Reserve facilities with newly constructed joint centers is constrained by a chronically underfunded military contruction program for the Navy and Marine Corps Reserve. Although the program has shown some growth over the past several years, the rate of increase has not kept pace with inflation.

The fiscal year 1983 Military Construction Naval Reserve (MCNR) program includes nine projects in support of the Marine Corps Reserve, leaving a $196 million backlog. This backlog consists of 15 projects which are programed, but unfunded, plus an additional 63 training facilities which require construction, replacement, renovation or upgrading, but are unprogramed.

MANAGEMENT

The readiness and mobilization potential of the Reserve can only be as effective as the management structure which subtends it. Commensurate with the planned expansion of Reserve capabilities is the requirement to initiate management organizations, procedures and systems which will effect maximum efficiency at the most economical level.

Starting in fiscal year 1982 we have inaugurated actions which will institute a streamlined management base upon which to build a revitalized Reserve organization.

Individual reserve management.—Before fiscal year 1982 the Marine Corps Reserve had no management structure to receive, administer, train, assign, support the mobilization of, and, eventually, discharge individual reservists. The Marine Corps Reserve Support Center (MCRSC) has been established at Kansas City for this purpose and is expected to achieve full capability by fiscal year 1984. With the advent of this organization, we look toward the realization of efficiencies not heretofore possible.

Better response and more effective administration will be achieved in the maintenance of 82,000 Reserve records and the expedition of 140,000 monthly transactions. Training management of individuals to meet mobilization requirements will be instituted. Individual Ready Reservists will be grouped and managed to ensure identification and availability of proper rank and MOS mix. Critical skill shortages will be reduced. Further expansion of the IMA program will be possible, thus insuring early fill for critical mobilization billets.

Reserve manpower management and pay.—Culminating a 7-year effort, the Marine Corps' Reserve Manpower Management and Pay System (REMMPS) became operational in January of this year. REMMPS provides an automated means of drill attendance accounting, retirement credit reporting, and expeditious payment of individual reservists (reducing payment time from 60 to 14 days).

Automated Data Processing (ADP) Systems

An automated data processing center will be established in fiscal year 1982 at the Marine Corps Reserve Support Center. This will fill a serious void in our capability to administer, train, and mobilize reservists. It will also permit us to replace antiquated manual methods of reporting and monitoring data, accessions, training, budgeting and the like.

Beginning in fiscal year 1982, automated data processing equipment will be introduced into the SMCR units. Funding has been approved by Congress to purchase 111 devices in fiscal year 1982, and funding for 100 additional devices is included in the fiscal year 1983 budget. The introduction of this automated data processing equipment will provide our SMCR units with equipment that is compatible with the active forces. It will permit them to update the present cumbersome and often inaccurate manual input methods.

Drill attendance reporting

In response to congressional concern, as well as the drive to eliminate waste, fraud, and abuse, the Marine Corps Reserve took steps in fiscal year 1981 to correct inaccurate Reserve drill attendance reporting. The Defense Audit Service reported that the problem existed at the reporting unit level. As a result, utilization of the field report was deleted as a fiscal management tool and the payroll report adopted as the basis for drill attendance reporting. Inspectors General conducted 294 inspections of unit drill attendance reports. No improprieties were discovered. Drill attendance reports were reviewed against the drill pay checks received for disbursement to individual reservists. As a result, 115 checks, totaling $14,738, were returned in fiscal year 1981. These checks were issued as a result of administrative error rather than unwarranted claims.

The replacement of the old field reporting system with the new Reserve Manpower Management and Pay System (REMMPS) in fiscal year 1982 will permit an even more accurate, real-time basis for calculating obligations and tracking drill attendance.

THE BUDGET

The fiscal year 1983 Reserve budget request of $214.3 million is a carefully formulated fiscal program to continue improvement in mobilization readiness and to support an SMCR end strength of 39,744 (38,300 average strength). It represents only 2.9 percent of the overall Marine Corps; a decline from 3.0 percent in fiscal year 1982.

Real growth averaged two percent from fiscal year 1978 to fiscal year 1980 with an increase of 10 percent in fiscal year 1981 and 11 percent in fiscal year 1982, when the proposed supplementai is included. In fiscal year 1983, the budget projects an increase of 6.7 percent in real growth.

For comparison, the fiscal year 1982 budget and fiscal year 1983 request are displayed by appropriation in the following tables.

MARINE CORPS RESERVE

[In millions of dollars]

	Fiscal year—	
	1982	1983
APPROPRIATION:		
Reserve personnel, Marine Corps (RPMC)	141.5	165.9
Operation and Maintenance, Marine Corps Reserve (O&MMCR)	40.3	48.4
Total	181.8	214.3

FISCAL YEAR 1982 SUPPLEMENTAL

[In millions of dollars]

	Program	Total
RPMC:		
Pay raise		12.9
DOPMA (Enl subsistence)	0.8	
Temporary lodging entitlement (TLE)	0.1	
PLC	0.9	
Contract meals	0.3	
Drill attendance	0.7	2.8
O&MMCR:		
Pay raise		0.1
Total reserve		15.8

RPMC

The $15.7 million RPMC supplemental represents: (1) $12.9 million for the fiscal year 1982 military pay raise; (2) $.9 million to support increased training of officer candidates in the Platoon Leaders Class (PLC); (3) $.7 million to increase the drill attendance percentage from 85 percent to 87 percent fiscal year 1981 actual was 87 percent); (4) $.3 million to support contract messing requirements; and (5) $.9 million to support entitlements in subsistence and temporary lodging mandated by Public Law 96–513.

O. & M.M.C.R

A supplemental of $.1 million for O&MMCR is requested to support the 4.8 percent civilian personnel pay raise.

FISCAL YEAR 1983 BUDGET

RPMC

The fiscal year 1983 RPMC Appropriation Budget request of $165.9 million will support funding requirements for pay and allowances, subsistence, clothing and travel for unit and individual training and for other training support.

Reserve Personnel, Marine Corps, Fiscal Year 1983

	Millions
Unit and individual training (budget activity 1):	
Pay and allowances, travel and clothing for SMCR	$78.723
Individual mobilization augmentees	3.200
Initial active duty for training	40.157
Training prior to recruit training	.427
Subtotal unit and individual training	122.507
Other training and support (budget activity 2):	
Mobilization training of Individual Ready Reserve (IRR)	2.411
School training	6.419
Special training	7.630
Administration and support	18.780
PLC	6.625
JROTC	1.528
Subtotal other training and support	43.393
Total appropriation	165.900

UNIT AND INDIVIDUAL TRAINING

The $78.723 million includes pay and allowances for an average strength of 2,338 officers and 30,037 enlisted within the units of the SMCR. This is an increase of 11 officers and 182 enlisted over fiscal year 1982. Funding is also included for replacement of uniform clothing.

The $3.2 million is targeted for Individual Mobilization Augmentees. The funding supports an average strength of 574 officers and 362 enlisted divided as follows: Pay Group A-436; Pay Group B-100; Pay Group C-300; and Pay Group D-100.

The $40.157 million will permit the Marine Corps Reserve to access and process through Initial Active Duty for Training, 9,005 reservists in fiscal year 1983. This is an increase of 183 trainees over fiscal year 1982.

Other training and support

The $2.411 million for Mobilization Training of Individual Ready Reserve provides 1,075 officers and 500 enlisted the opportunity to participate in counterpart and skill refresher training.

The $6.419 million for School Training encompasses the formal training required for refresher/proficiency, career development, acquisition, and unit conversions. School training will be provided to 2,179 officers and 1,552 enlisted, an increase of 9,438 mandays over fiscal year 1982.

The $7.63 million in Special Training funds exercises, conferences, operational training, management support, service mission support, competitive events, recruitment and retention. A total of 1,730 officers and 1,002 enlisted will participate in fiscal year 1983, an increase of 3,828 mandays over fiscal year 1982.

Administration and support

During fiscal year 1983, 124 officers and 504 enlisted full-time support Reserve personnel are planned to be on active duty under title 10 USC, sections 265, 672(d) and 678. This is an increase of 3 officers and 242 enlisted from fiscal year 1982.

To achieve the growth discussed, while maintaining quality and reducing skill shortages, $2.712 million has been allocated to enlistment, reenlistment and educational assistance bonuses.

As an additional aid in reducing grade and skill degradation, $413 thousand has been earmarked for the SMCR Affiliation Bonus. This is an increase of 658 bonuses over fiscal year 1982.

In fiscal year 1983 we intend to increase the Platoon Leaders Class (PLC) by 630 mandays. This will require $6.625 million for pay, subsistence, travel, and clothing. These personnel attend two periods of summer training and, upon completion of training and graduation from college, are commissioned in the Marine Corps Reserve and assigned to active duty for 3 years.

The $1.528 million for Junior ROTC provides for the initial issue of uniforms for 3,050 new students who will be trained during fiscal year 1983.

O. & M.M.C.R

The fiscal year 1983 O&MMCR Appropriation Budget request of $48.4 million provides the funds for the day-to-day costs of operating and maintaining Marine Corps Reserve forces, functions, activities and facilities.

Operation and maintenance, Marine Corps Reserve

Budget activity fiscal year 1983:	*Millions*
Mission forces	$24.7
Depot maintenance	1.5
Other support	22.2
Total	48.4

Mission forces.—The funding of $24.7 million contained in Mission Forces provides for SMCR unit training, equipment, operation and maintenance costs which support inactive duty, weekend away and annual Active Duty Training. Included are funds for Marine Corps Reserve participation in JCS directed and coordinated exercises, intraservice, and interservice training exercises and field training exercises and command post exercises. To improve SMCR readiness, the following increases are included:

The $3.0 million finances increased training readiness. The increase encompasses commercial hire of vehicles, transportation costs, fuel, consumable supplies, and repair parts to support the weekend away and ATD training program. Also included are replenishment/replacement and acquisition of equipment to partially fill existing deficiencies in both organizational and individual training allowances as well as initial issue of new items of equipment being introduced into the inventory.

The $.8 million to support an SMCR strength increase of 1,204 personnel and 4th Marine Aircraft Wing modernization.

Depot maintenance.—The $1.5 million finances fifth echelon Depot Maintenance and rebuild of 83 major end items of Reserve training equipment. Included is an increase of $.1 million to rebuild additional secondary reparable items required to support the tempo of training.

Other support.—Funding of $22.2 million in Other Support is budgeted for Base Operations and Other Activities.

The $11.3 million is allocated for Base Operations. This includes funding to maintain and operate our training centers, pay 4th Marine Division-Wing Team civilians, maintain SMCR unit ADP devices, and provide other necessary base services. A small increase of $800 thousand accommodates the introduction of additional SMCR ADP devices and permits some training center upgrade through replacement of obsolete and unserviceable plant property. In addition, the increase includes civilianization of 9 military billets to improve administrative and fiscal continuity and make more efficient use of limited military resources.

Other Activities, $10.9 million; over half of the funds included under this category ($5.7 million) are devoted to supporting the level of recruiting effort and advertising necessary to attain the planned non prior service accessions and increase the sorely needed prior service input. The total represents a small increase of $745 thousand over fiscal year 1982.

The $4.2 million is allocated to the operation of the Marine Corps Reserve Support Center in its role as the locus of individual management activity. The increase of $400 thousand from fiscal year 1982 has been incorporated to insure full operation by fiscal year 1984 and effective execution of the broad supervisory mission.

The remaining $1.0 million encompasses such diverse items as postal expenses, headquarters personnel travel and entry fees for competition in arms.

CONCLUSION

Mr. Chairman, as I stated at the outset, the Marine Corps Reserve is alive and well. Each year we see it grow in vigor and potential, assuming an ever widening role as a vital adjunct to the active forces. It would be easy at this point to lie back and rest on our laurels, content with the current rate of progress. We know, and you know, that this is not enough. We may never again have the luxury of a leisurely mobilization. World events move swiftly and the Reserve must be ready to react as quickly.

We are accelerating the cadence; moving to improve readiness, modernizing our forces and facilities and introducing efficient management. The road to fulfillment will not be easy, but I am confident with money, sweat and a little luck the job will be done. I would only ask that you, the Congress, continue to offer understanding and sustenance without which the task would be arduous if not impossible.

Senator **Humphrey**. Let me congratulate both of you on the excellent work you have done in the area of personnel retention and recruitment.

I cannot immediately find your dollar request, Admiral Palmer. What is that again?

Admiral **Palmer**. The request is $653 million. I pointed out that it is an $82 million net increase, but the real program growth is $64.8, or just about exactly 10 percent.

Senator **Humphrey**. That is pretty good.

AIRFRAME AND ENGINES

This business of airframe and engines, that is the A-7 problem?

Admiral **Palmer**. The engine in the A-7 and the airframe in F-4.

Senator **Humphrey**. And the F-4?

Admiral **Palmer**. F-4N aircraft.

Senator **Humphrey**. That has not necessarily been related to O. & M. in the past?

Admiral **Palmer**. No, I cannot blame it on that. I think that is the old vertical acquisition thing, getting a hand-me-down aircraft, and we operate them at the wrong end of the service life, so we get the lion's share of fatigue type problems.

BMAR

Senator **Humphrey**. What is the BMAR situation again?

Admiral **Palmer**. BMAR is about $17 million over the containment level.

Senator **Humphrey**. And where will it be at the end of 1983?

Admiral **Palmer**. $38 million.

Senator **Humphrey**. So that is growing.

Admiral **Palmer**. That is growing, yes, sir.

Senator **Humphrey**. How about backlog construction?

Admiral **Palmer**. That is $471 million and is growing.

Senator **Humphrey**. Can you give me the 1982 and 1983 projected figures?

Admiral **Palmer**. Yes, I can. The figures for Military Construction, Naval Reserve for 1982 are $36 million; in 1983, $25 million.

Senator **Humphrey**. Say that again.

Admiral **Palmer**. In 1982 it is $36 million and in 1983 it is $25 million.

Senator **Humphrey**. So that is declining?

Admiral **Palmer**. Yes, sir, it is. Both of those are declining.

Senator **Humphrey**. Both of what?

Admiral **Palmer**. Both of those two areas, BMAR and Milcon, are increasing in backlog.

Senator **Humphrey**. I must have misunderstood. You said the backlog in 1982 is $36 million for Milcon?

Admiral **Palmer**. No, that is the money against the backlog. The backlog itself is——

Senator **Humphrey**. What is the figure for the backlog?

Admiral **Palmer**. $471 million.

Senator **Humphrey**. What will it be in 1983? That minus $25 million? Is that it?

Admiral **Palmer**. Let me provide that for the record.

[The information follows:]

Military Construction Backlog in Fiscal Year 1983

The military construction backlog of the Naval Reserve is projected to be $471 million at the start of fiscal year 1983. The fiscal year estimate of $270 million which was previously used for the fiscal year 1982 backlog understated the requirements. During 1981 an exhaustive review of the backlog was initiated, in particular the requirement identified in the whole center repair program. The results were significant with about 85 newly identified projects raising the fiscal year 1983 backlog to $471 million. After offsetting this amount by the $25.2 million requested in the fiscal year 1983 budget the end year fiscal year 1983 backlog would be about $449 million. Funding levels for the Military Construction Naval Reserve program have remained relatively constant, but with a decline in the fiscal year 1983 budget as compared to 1982 appropriation. The below provides a brief summary.

Fiscal year appropriated by Congress:	*Million*
1981	$33.0
1982	36.0
1983	[1] 25.2

[1] President's budget request.

Senator **Humphrey**. All right.

STEAMING DAYS

Steaming days are remaining about the same; is that right?

Admiral **Palmer**. Yes, about 14.

Senator **Humphrey**. Well, where is this extra money going, this real increase of 10 percent or whatever it is?

Admiral **Palmer**. It goes into a variety of different training things. I am comfortable with the steaming days at 14. I am not asking for an increase. That would be adequate for my purposes.

Senator **Humphrey**. Can you tell us where the added emphasis is, then, in the fiscal year 1983 plan?

Admiral **Palmer**. Additional training devices, accelerating the reserve training support system, additional moneys for transportation and those sorts of things.

FLYING HOURS

Senator **Humphrey**. What about flying hours?

Admiral **Palmer**. The flying hour program remains about the same. In fiscal year 1983 we dropped from our traditional 85 percent of program to 83 percent of program. The basic hours involved are for the carrier squadrons, 150 hours per aircrew per year, and for the shore-based squadrons, 130 hours per aircrew per year.

Senator **Humphrey**. That is not very much. What was your request in the flying area? Did you get what you wanted? Do you consider that adequate?

Admiral **Palmer**. In the flying area?

Senator HUMPHREY. Yes.

Admiral PALMER. Yes, I think it is going to be. We look at it very carefully at the midyear review, and historically we have often reprogramed money from there. I have the advantage of having the disadvantage of aircraft problems. Therefore, we will probably do less flying of the squadron augment unit pilots, who are not squadron members. As a matter of fact, I have taken attack augment pilots off flight status because I just do not have the operating airframes in the A-7 squadrons to support their flight time.

Senator HUMPHREY. So your constraint is aircraft?

Admiral PALMER. I am aircraft constrained in that account right now. I believe that account is adequately funded.

Senator HUMPHREY. What is being done to address this particular area?

Admiral PALMER. Of engines and airframes?

Senator HUMPHREY. Yes.

Admiral Palmer. Well, two things. Our general tack is to try to repair those engines. Unfortunately, last year, when the turbine blades arrived, they were unsatisfactory. So they all had to be rejected and we had to go get a new vendor. That materially delayed repair of those engines.

On the other hand, as I mentioned in my statement, we are now looking at new aircraft, specifically F/A-18.

There are various ways of helping solve the problem. One of them is to stand down an A-7B squadron and stand up an A-6E squadron or an A-7E squadron. Another way is to expedite reserve acquisition of the F/A-18 Hornet aircraft. Probably we are going to do both of these things in order to work our way out of the problem. It is a tough one and we are not going to be able to solve it by fixing the engines this year.

SPARE PARTS

Senator HUMPHREY. Spare parts in general. What is the situation for aircraft?

Admiral PALMER. Aircraft spare parts are generally in good supply. I am usually able to maintain aircraft system availability at a rate slightly higher than the active Navy. I have access to their spare parts, and then I have a transportation system for moving them around.

So even though I operate the older aircraft, we are doing fairly well on the parts, although we always can use more.

SHIP MAINTENANCE

Senator HUMPHREY. How about maintenance for ships? How are you doing there?

Admiral PALMER. What is your question?

Senator HUMPHREY. Maintenance for ships. I do not know the official title for that area. Do you do that yourself or does the active Navy?

Admiral PALMER. Active Navy does that. I take care of the Reserve aircraft. They take care of the Reserve ships.

Senator HUMPHREY. I see. That is done with O. &. M. money, but the active components do it, and you pay for it. Well, how is it going? Is your training constrained by backlog maintenance? Are the ships overdue for overhaul?

Admiral **Palmer**. We were very much constrained over the years when we retained the World War II era FRAM I destroyer but we are almost out of that category now. We have overhauled the last batch with the new *Knox*-class frigates, we expect never again to be so constrained. We are working hand in glove, Active and Reserve, to make sure that those ships are maintained to active duty standards.

Doing that, we are building a series of Naval Reserve maintenance facilities that I had mentioned, six of them. The newest one and the best one is up at Newport, R.I. It is worth seeing. It is really a very fine facility which we opened last July.

PROTECTIVE CHEMICAL EQUIPMENT

Senator **Humphrey**. What is the situation in the Naval Reserve in the area of protective chemical equipment?

Admiral **Palmer**. That is not a problem for us because it is either on the ship to which we mobilize—it is just not a Naval Reserve problem.

Admiral **Humphrey**. So there is no equipment?

Admiral **Palmer**. No, sir; that equipment is maintained in the active side.

Senator **Humphrey**. What is the training situation in the Marine Corps Reserves, General? What is the trend there? Is it getting better, worse, or is it the same?

General **Crist**. My training is improving and in my RPMC budget this year, we are seeing a real growth of 12.9 percent.

Senator **Humphrey**. What is RP?

General **Crist**. I am sorry. The O. & M.C.R.

Senator **Humphrey**. What is that?

General **Crist**. O. & M.

Senator **Humphrey**. OK. Increasing by what?

General **Crist**. My O. & M. budget shows a 12.9-percent real growth. Of that 12.9 percent, a very large part of it is going into support of training and the other part to support our end strength increase.

MATERIEL SHORTAGES

Senator **Humphrey**. What about the serious shortages in the area of materiel that you allude to?

General **Crist**. Yes, sir; we are $546 million short in equipment, $138 million short in secondary items, and $42 million short in the Navy-funded stocks of medical and dental aviation parts and equipment.

Senator **Humphrey**. Would that get any better under the 1983 budget?

General **Crist**. It will be reduced in the 1983 budget, sir. That backlog will be reduced by 5.2 percent.

Senator **Humphrey**. What are you doing in the area of home center construction?

General **Crist**. There we have a problem, sir. We are showing, as of the end of 1983, and that includes the 1982 and 1983 budgets, $195.7 million backlog. And that backlog has increased.

Senator **Humphrey**. All right. I think that takes care of it. Thank you very much, Admiral Palmer and General Crist.

While the next panel is being seated, I want to introduce into the record the statement of Senator Stennis. We will submit to the witnesses some questions posed by Senator Stennis. He asked me to express his regret that he is unable to be here with us as he is attending another committee meeting at this hour.

[The prepared statement of Senator Stennis follows:]

Prepared Statement by Senator John C. Stennis, a U.S. Senator From the State of Mississippi

I want to welcome each of you leaders of our National Guard and Reserve components here today. In addition, I want to welcome General Greenlief and General Roberts, representing the National Guard and Reserve Officer Associations.

I believe the Guard and Reserve offers one of the best opportunities for strengthening our military power today. While this defense budget has increased substantially—more perhaps than any time in peacetime—it is still a limited budget and does not buy everything that everybody might want. In fact looking at the figures at the end of 5 years, there is little or no expansion of the active military force structure provided by this budget and 5-year plan compared with the previous plan. Because of the capable people in the Guard and Reserve who wish to participate in the military on a part-time basis, I believe the Guard and Reserve is a place where we can significantly improve our military capability.

Last year, the committee adopted a $400 million plan for improving the equipment of the Army National Guard; $50 million was authorized and appropriated last year as a first increment of this plan. The concept was to put modern equipment—the everyday nuts and bolts items that it takes to make a military unit work—in the hands of units that had the manpower. In other words, my view was that if a Guard unit had the qualified and talented manpower to do the job, we should be able to provide the equipment. I believe we should look to expanding this concept to the other Reserve components this year. I would like each of you to provide me your comments on this concept and then for the record provide the units that have the manpower and the equipment it would take to bring those units up to satisfactory preparedness. In addition, some indication of the priority of various units would be most helpful.

Senator **Humphrey**. Our next witnesses are Maj. Gen. John Conaway, Director of the Air National Guard, and Maj. Gen. Richard Bodycombe, Chief of the Air Force Reserve.

Gentlemen, we are glad to have you here this morning. Thank you for your patience.

General Conaway, would you begin, please?

STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, DIRECTOR, AIR NATIONAL GUARD

General **Conaway**. Thank you, sir.

Mr. Chairman, I welcome the opportunity to appear before you and discuss the current operation and maintenance posture of the Air National Guard. I have submitted a more detailed statement. If you will accept that I will try to summarize briefly.

TOP AIR NATIONAL GUARD UNIT

I might add at the outset, sir, that your home state of New Hampshire is the home of one of the top Air National Guard units of all of our outstanding units that we have in the country, and I commend General Blatsos, General Cuddihee, and Colonel Lilljedahl for the superb job that they have done with the KC-135 unit at Pease Air Force Base. As you know, they have won recently the Spaatz Trophy for the outstanding Air National Guard unit in the whole country. They have won the Strategic Air Command Trophy for the outstanding Reserve component unit. They continue on and on to win awards and to attain more than their share, in addition to hosting the Guard, Reserve and Active units that come through Pease on major tanker task force operations. So we are as proud of them as I know you are for the great combat-ready job they do.

They, along with 95 percent of our other units are combat-ready, deployable, and on the go within 72 hours.

AIR GUARD MANPOWER

As for our manpower, sir, the Air National Guard has exceeded its military strength levels during each of the last 3 fiscal years, and we do not foresee a major change in this upward trend. We could not have accomplished these strength gains without the outstanding support of Congress and your committee. The fiscal year 1982 strength program is currently on target at 98,700 personnel, which is the highest in the history of the Air National Guard. We fully expect to meet both the fiscal years 1982 and 1983 overall strength programs.

But despite this apparent success in achieving our overall strength goals, we do have problems in some critical skill manning, where we are still experiencing some shortages in certain career fields. Our incentive program is helping to alleviate the problem, and we solicit your continued support of the enlistment-reenlistment educational benefits program.

On the recruiting side, our efforts are currently directed toward precision recruiting, where we recruit for validated unit manning document vacancies with emphasis on our most critical skills. Our commanders and career advisers are working to increase the retention of our highly skilled members, thereby helping us to maintain this high level of combat readiness. We think our maintenance force is the strong pole in the tent of Air National Guard readiness.

As you know, our full-time manpower programs consist of Guard members on active duty as well as military technicians. This combined full-time workforce is the single most important ingredient for our success. It provides the nucleus for training our part-time force and conducting our increasing level of day-to-day worldwide mission support of the Active Force, support which continues to increase daily.

The NCO's we have at a base like Pease Air Force Base and the experienced officer cadre we have are the force that can train to make us viable and one of the most ready forces in the world today.

EQUIPMENT

Turning to the equipment issue, I feel that the KC-135 tanker reengining program and the shortage in aircraft support equipment are particularly significant to the Air National Guard. The benefits derived from reengining the KC-135 with the JT3D and the CFM-56 engines have been addressed by various individuals at many different times. I just want to reinforce the need for these engines and the Air Guard position on the programs. We feel that both the CFM-56 and the JT3D proposals must be pursued simultaneously and without prejudice to one another.

We certainly appreciate your support, sir, on these efforts at reengining the Air Force and Guard and Reserve tankers, and for the money appropriated to the Air Force in fiscal year 1982. As I am sure you are aware, these funds have been programed to go for Air National Guard reengining of our three worst case units.

Another equipment shortage causing us concern is the shortage in aircraft support equipment. Although the Active Force has been supportive in their efforts to alleviate our shortages, the Air Guard nevertheless has a significant shortage in support equipment.

The majority of our equipment shortages are programed within a 5-year period. However, as a result of a large number of recent conversions, the shortage in F-4 support equipment is considered to be most serious. Units converting to the F-4 have been able to continue their required training, but at times only by borrowing equipment from other units. A large amount of the shortage is in the mobility equipment which is required to support the wartime mission.

Illustrative are shortages in munition trailers, munitions loading trucks, missile support, and general aircraft items such as flight line generators.

As I previously stated, the Active Air Force has been supportive in their effort to reduce these shortages, but this is a pervasive problem throughout the total Air Force. We need to insure that the equipment required to fight and win will be on hand when it is needed.

READINESS

Despite the problems I have just mentioned, I am pleased to report that the readiness of the Air National Guard does remain at a high level and this is illustrated by the fact that in 1981 the Air National Guard achieved the lowest Category A aircraft accident rate in our entire history, with only 1.7 major accidents per 100,000 hours of flying. This was achieved by a force that is predominately fighters which fly about 75 percent of our flying hours.

We have almost 1,700 aircraft, Mr. Chairman, with 4,000 pilots who fly about 412,000 hours a year. Only seven major aircraft mishaps occurred last year.

Accident prevention requires dedication and a positive professional attitude. Our people reflect both. The Air Guard is proud of its combat readiness and genuine role in today's total Air Force.

I will now just briefly wrap up the Air National Guard operation and maintenance request for 1983. We have an increase of $114 million, or 6.9 percent above the fiscal year 1982 level of $1.6 billion. Three percent of the increase is price-related, while the remaining 3.9 percent is real growth resulting from force and program changes. These increases will support the Air Guard's readiness and training requirements as we continue weapon system modernization and pick up new missions in fiscal year 1983.

Our aviation fuel costs decreased by $1.2 million in fiscal year 1983, but this is a result of the fuel price decrease of $18.5 million, partially offset by an increase in programs requirements of $17.3 million, due to force changes.

DEBT MAINTENANCE REQUEST

Our fiscal year 1983 request for depot maintenance is $48.6 million above the fiscal year 1982 level; $32.7 million due to program changes, and $15.9 million in price growth. The depot maintenance program growth is primarily due to the type of aircraft and increased scope of work required, principally the F-4's, sir. Of our 1,700 aircraft, we are growing to over 600 F/RF-4 aircraft, and about 362 A-7's. These two weapon systems represent 1,000 of our 1,700 aircraft. At the current rate of programing over 500 of our F-4's will be over 20 years of age by 1988. This requires increasing the scope of work at depot level, which increases the price for us. We are not in an inexpensive weapon system, by any means.

TACTICAL CONTROL AND RDJTF UNITS

In the area of training support, we have an increase of $66.4 million over fiscal year 1982, consisting of $52 million in price increases and $14.4 million in program growth. The major programmatic changes include mobility equipment, supply requirements for combat control, tactical control and rapid deployment joint task force units. We have nine of our major flying units in the Rapid Deployment Joint Task Force. Five of our fighter reconnaissance units and four airlift units are in the RDJTF as well as five combat communications ground units.

We also have increased exercise participation and new base operating support responsibilities at Duluth, Minn., Hancock Field, N.Y., and Kingsley Field, Oreg.

Finally, in command administration costs, we have only a $200,000 increase, all of which is price growth.

In summary, sir, we are requesting an increase of $114 million, or 6.9 percent growth in operation and maintenance in fiscal year 1983. We feel this level of funding will cover our current known requirements. The main concern at this time is the rapidly rising cost of our depot maintenance program, which has increased almost 40 percent in 2 years.

We thank you for your support of our program, sir, and we are ready to answer any questions.

[The prepared statement of General Conaway follows:]

PREPARED STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, DIRECTOR, AIR NATIONAL GUARD, U.S. AIR FORCE

AIR NATIONAL GUARD

Overview

It is my pleasure to once again report to you on the current posture of the Air National Guard.

The Air Guard is at its highest readiness level in history, rapidly approaching a manning level of 100,000 men and women, military and military technicians and deeply committed to performance of both a State and Federal mission.

The State mission of the Air National Guard is to provide organized, trained, and equipped units to respond to orders of State authorities, to provide protection of life and property, and preserve peace, order and public safety. During fiscal year 1981, the Air National Guard was called upon 22 times to perform State duty for approximately 3,800 workdays. These missions involved support of civil disturbance control operations, such as strikes and nuclear protexts, power outages, forest fires, and the California Med Fly operation. In addition, the Air Guard was called up 45 times to support the National Search and Rescue Service and was involved in 32 saves/rescues.

The Air National Guard's Federal mission, as part of the total Air Force, is to provide units of properly equipped and trained personnel for prompt mobilization whenever called upon in time of crisis. Our units also perform designated Air Force missions during peacetime, primarliy as a byproduct of training.

The Air Guard is manned and ready to carry out this dual mission. It is our brief that strength through readiness is the key to success.

The readiness of our flying units continues to remain high despite increased taskings and conversions to newer and more complex weapon systems. Military manning was approximately 98,300 at the end of fiscal year 1981 and is projected to be 100,100 by the end of fiscal year 1982 and approximately 101,800 by the end of fiscal year 1983. The Air Guard flies more than 1,600 aircraft in a variety of demanding missions ranging from Air Defense and Tactical Fighter and Airlift to Strategic Air Refueling and rescue and Recovery. We participate as full partners with the active Air Force and the Air Force Reserve in carrying out these missions assigned by our civilian leadership.

In 1981, the Air Guard achieved the lowest Category A Aircraft Accident Rate in its history with a rate of 1.7 accidents per 100,000 hours of flying. Prevention of accidents requires a positive professional attitude and dedication to make the safety program work. Our people reflect both. The Air Guard is proud of its combat readiness, recent accomplishments, and genuine role in today's total Air Force.

POSTURE

Flying units posture

Air National Guard flying units are organized into 24 wings, 67 groups and 91 flying squadrons with more than 1,600 assigned aircraft. The continued strong support of the active Air Force is permitting us to replace older, less capable aircraft with more modern and sophisticated weapon systems. In the first quarter of fiscal year 1982, one OA-37 unit transitioned to A-10s, and F-105 unit converted to A-7s and two units upgraded from C-130As and C-130Es to C-130Es and C-130Hs respectively. In the second quarter, the Guard's only EB-57 unit converted to F-4's while in the third and fourth quarters the F-101 interceptors will be retired, with the two F-101 units converting to F-4's.

In fiscal year 1983, the Air National Guard will receive its first F-16's and will convert an A-7 unit to this modern weapon system in the fourth quarter. The multimission F-16 is an exceptional aircraft with a superior technological capability. Its introduction into the Air National Guard is another step forward in the continuing efforts to upgrade mission capability and achieve a general compatibility Active and Air National Guard aircraft types.

Other modernization efforts in fiscal year 1983 include the conversion of an O-2 unit to F-4's in the first quarter and the coversion of the Air Guard's remaining F-105 unit to F-4's in the second quarter. This will complete the retirement of the F-105 tactical fighter from the Air National Guard. In addition to the introduction of the F-16, the fourth quarter will see the conversion of an RF-4C unit to F-4s and an increase in Primary Aircraft Authorization (PAA) for an RF-4C unit concurrent with the establishment of a Replacement Training Unit (RTU) for ANG reconnaissance assets. An A-7 unit will also increase its PAA from 18 to 24 aircraft.

As a result of these concerted modernization efforts, Air National Guard flying units make a substantial contribution to the total Air Force combat capability and will fulfill a large portion of force commitment during serious crisis. In fiscal year 1983, the Air National Guard will possess 66 percent of the total Air Force Air Defense Interceptor forces; 54 percent of Tactical Reconnaissance forces; 32 percent of Tactical Airlift forces; 26 percent of Tactical Fighter forces; 17 percent of the Aerial Refueling forces; 14 percent of the Rescue and Recovery forces; 25 percent of Electronic Combat Forces; and 32 percent of Tactical Air Support forces. In addition, five flying units are active members of our nation's Rapid Deployment Joint Task Force (RDJTF).

Nonflying units

Equally important to the success of the Air National Guard mission are our nonflying units. There are 243 independent units heavily concentrated in the areas of combat communications, weather, tactical control, electronic installation, civil engineering and air base defense.

The combat communications units are equipped and staffed to support the Tactical Air Forces. They provide specific communications service to forward deployed commanders and provide restoral service to the Defense Communications System. They are also equipped to provide terminal air traffic control facilities and services. All combat communications unit assets are designated in the USAF War and Mobilization Plan and most units are specifically tasked to support unified command war plans. Of particular interest is the fact that five combat communications units are also members of the RDJTF. The Air National Guard has also been tasked to provide both near and long term support to the Joint Communications Support Element (JCSE). An existing Air National Guard combat communications unit will provide the near term support starting in fiscal year 1982 with a permanent unit organized in fiscal year 1984. The prime mission of the JCSE is Joint Task Force support. During the RDJTF Exercise Bright Star 82, Air National Guard units provided approximately 75 percent of the Air Force combat communications. As in the past two years, an Air National Guard combat communications group and its subordinate units have deployed approximately 400 personnel to Europe in support of major exercises. Significant support has also been provided for exercises in the continental U.S. and in the Pacific Theater.

Most of our weather flights have a tasking to support Army Guard and Reserve units. We do have one weather flight tasked to support the Air Force Tactical Weather System.

Our tactical control units operate control and reporting centers and posts in addition to providing forward air control posts. All units have wartime taskings and quick response deployment schedules. Most of these units now possess the TPS-43E Radar. The remaining units will receive this new radar in late fiscal year 1982 when deliveries from fiscal year 1981 procurement begin. Tactical control units train at their home stations by controlling active and Air National Guard fighter aircraft and by system-wide simulated exercises. A limited number of units also participate in large scale exercises each year. Two new Air Support Radar Teams are also being added in fiscal year 1982. Each unit will be equipped with new TPB-1C tactical radars.

Our Electronic Installation Squadrons (EIS) are equipped and trained to engineer, install, relocate, remove, restore and accomplish on-site depot level maintenance on radars, antennas, cable plants, radios, and teletype and communications centers. They maintain proficiency by augmenting the Air Force EIS on Communications-Electronics-Meteorological (CEM) facility requirements worldwide. They provide the Air Force with a highly trained CEM engineering, installation and maintenance force capable of immediate response to contingency requirements. In fiscal year 1981, they provided approximately 52,000 training workdays to the Air Force by accomplishing engineering and installation work as training projects. Comparable levels of support are anticipated in fiscal year 1982 and fiscal year 1983. Two Air Guard EIS units deployed to Europe in August 1981 and performed successfully under simulated wartime conditions. The exercise was a complete success.

Like their flying unit counterparts, our non-flying units contribute heavily to total Air Force combat capability. In fiscal year 1983, the Air National Guard will possess 70 percent of the total Air Force combat communications forces; 50 percent of the tactical control forces; 55 percent of the electronics installation force and 12 percent of the weather reporting and forcasting forces.

Air National Guard Civil Engineering Red Horse and Prime Beef units have conducted deployments to active Air Force bases, Air National Guard bases, and Army National Guard posts for annual training. The construction, alteration, and repair projects undertaken by these forces not only helps them hone their skills for their wartime mission but also greatly assists the host base in completing urgently needed projects.

In 1982, the Air Guard will activate an Air Base Defense Squadron Headquarters and an Air Base Defense Flight. They are the first dedicated Air Base Defense units in the Air National Guard and the Air Force in the CONUS. A second Air Base Defense Flight will be activated in fiscal year 1983. These units will be equipped and trained to provide ground defense of critical Air Force bases and storage sites in Europe.

REALISTIC TRAINING

I have discussed some of the contributions the Air National Guard makes to the Air Force as a byproduct of training. This realistic training is best embodied through our participation as full partners with other components in JCS and USAF training exercises. Our increased overseas deployments, where we have temporarily moved entire flying units along with ground support personnel, as well as civil engineering and communications units, have furnished us with valuable and realistic training.

To illustrate the Air National Guard's global readiness and the realistic training received, we have recently deployed F-4's to Iceland, A-10's to German, A-7's to Italy, and F-105's to Turkey. We also had two KC-135 tankers on constant tasking with the European Tanker Task Force. In the Southern Command region, the Air Guard maintains four A-7's on station at all times in defense of the Panama Canal, maintains two aircraft Control and Warning Radars in defense of Puerto Rico, and we support airlift requirements throughout Central and South America with six C-130 aircraft.

In Alaska, our RF-4's have provided photo support for exercises and Air Guard tankers have supported the Alaskan Tanker Task Force.

In the Pacific, our F-4's from Hawaii have participated in PACAFs Red Flag and have fired missiles at Combat Sage. Two Aircraft Control and Warning Radar Squadrons provide 24 hour per day air defense surveillance of Hawaii. In addition, we had more than three hundred combat communications and one hundred Tactical Air Control personnel supporting JCS exercise Team Spirit in Korea.

Such a degree of operational readiness demonstrates that the Air National Guard, when equipped with modern, long range tactical aircraft and equipment, is a full Total Force partner in the front-line of our defense forces.

I am proud to report to this committee that combat readiness and capability to perform the wartime mission of the Air National Guard was again successfully demonstrated in 1981 by Air National Guard units during Air Force Operational Readiness Inspections (ORIs). These inspections were conducted under realistic wartime scenarios, and the majority of Air National Guard units received these inspections while at deployed locations. Since the inception of the realistic scenario in 1976, covering every aspect of the wartime mission, Air National Guard units have materially enhanced their capability and readiness.

MANPOWER

The Air National Guard achieved an end strength of 98,293 in fiscal year 1981. This is the highest strength level ever achieved by the Air National Guard, and it exceeded the original fiscal year 1981 budgeted strength by almost 2,500 personnel and the revised programed strength by 210 personnel.

With the help of the Congress, the Air National Guard was able to add 1,000 personnel to our fiscal year 1982 programed drill strength. The Air Guard's revised program is 96,788 drill strength and 3,312 full-time active duty Guardsmen for an end strenght of 100,100 and an average strength of 99,500. In the fiscal year 1983 President's Budget, we have programed 96,623 drill strength and 5,158 full-time active duty for a total end strength of 101,781 and an average strength of 101,100. This strength level supports approximately 98.6 percent of the Air Guard's projected wartime requirement.

While the Air Guard's fiscal year 1981 strength was above the programed levels, many critical skills remain well below an acceptable level. The Air National Guard is still experiencing difficulty in securing non-prior and prior service personnel in certain career fields such as munitions, security, avionic sensor systems, and ground communications-electronics maintenance. Also with the help of the Congress, we have expanded our enlistment incentive program in fiscal year 1982 and fiscal year 1983 to address this problem. We fully expect to achieve our strength goals in each fiscal year and anticipate improved manning in the critical skill areas.

The Air Guard's Recruiting program is currently structured toward precision recruiting (recruiting for critical skills or valid Unit Manning Document vacanicies only). The overall responsibility for recruiting has been delegated to the States and the recruiters have been administratively reassigned from the State headquarters staff to each base. Along with precision recruiting, the Air Guard is placing special command emphasis on recruiting rated officers, medical officers, minorities, and women. Renewed emphasis is being placed on the Palace Front program. This program allows the Air National Guard to identify prior service Air Force personnel separating from the Active Air Force. The special emphasis on these programs will aid our recruiters in finding qualified individuals from all backgrounds to fill existing critical skill vacancies.

A formal Air National Guard Retention program utilizing Base Career Advisors was implemented in May 1981. Both first term and overall retention improved as a result of increased emphasis on this program. The retention rate increased from 61.4 percent in fiscal year 1980 to 63.1 percent in fiscal year 1981. An integral part of the retention program is an effort to retrain certain personnel into critical skill shortage areas. Many of these skills require mandatory attendance at formal technical schools. Again, with the help of the Congress, funding was provided in fiscal year 1982 to enter approximately 1,000 personnel into a retraining program, thus increasing our critical skill manning level. The fiscal year 1983 President's Budget also includes funding to retrain 1,500 individuals. With this level of effort, we fully expect to achieve our stated critical skill goals. With full implementation of the Retention program we expect to reduce the critical skills shortages within the Air National Guard and further increase the quality of the force.

Incentives have a direct effect on both recruiting and retention. Fiscal year 1981 saw two new programs: the Affiliation Bonus and the Student Loan Repayment Program. The affiliation bonus encourages skilled prior active service personnel to affiliate early with Selected Reserve units. An eligible person obligates himself to serve satisfactorily in the Selected Reserve for the full period of his remaining military service obligation and is awarded a bonus of $25 per month for each month of remaining military service obligation. The Loan Repayment Program authorizes the Secretary of Defense to repay up to 15 percent of the loan amount or $500, whichever is greater, of Higher Education Act loans for individuals who enlist or reenlist in the Selected Reserve. We believe that these incentive programs have and will continue to play a significant role in reducing our mission essential skill shortages.

The Air National Guard full-time manpower programs consist of military technicians and guardsmen on active duty. They comprise the daily workforce that is essential to mission accomplishment. This combined technician-military workforce is the catalyst of success in meeting the responsibilities and missions assigned to the Air National Guard. Under the Total Force policy, readiness and response capability are completely dependent on the availability of these manpower resources.

In fiscal year 1981, we fully met our combined technician and military full-time manpower end strength. We fully expect to accomplish all programed technician conversions through further voluntary conversions and technician attrition during fiscal year 1982 as well as again meeting our full-time manpower strength.

Since the Congress has permitted us to determine and program the appropriate mix of technicians and full-time military, we plan to voluntarily convert an additional 600 technician positions to military status in fiscal year 1983. This will be accomplished in those functions where it is advantageous to have full-time military. We have also requested 1,246 additional full-time military to fill increased requirements associated with aircraft and equipment changes and other support requirements assigned to Air National Guard units.

OPERATION AND MAINTENANCE BUDGET REQUIREMENTS

Operation and Maintenance funding provides for the day-to-day operating expenses of ANG units, including pay of civilians, aviation and ground fuel, depot maintenance of assigned aircraft, supplies, and other expenses.

The following table shows the O. & M. Air National Guard funding data for fiscal year 1981-83.

[In millions of dollars]

	Fiscal year—		
	1981	1982	1983
Budget activity:			
Operation of aircraft	493.1	531.8	530.6
Logistical support	207.7	241.0	289.6
Training support	814.8	871.5	937.9
Service-wide support	3.0	3.5	3.7
Total	1,518.6	1,647.8	1,761.8

The Air National Guard Operation and Maintenance request for fiscal year 1983 increases $114 million, or 6.9 percent, above the fiscal year 1982 level. Three percent of this growth is price related ($49.6 million), while the remaining 3.9 percent represents program growth ($64.4 million). These increases are required to support the Air Guard's readiness and training requirements as weapons system modernization continues in fiscal year 1983. I will briefly address the major changes within each program of the appropriation.

Operation of aircraft.—This program finances the purchase of aviation fuel for the Air Guard's assigned aircraft. The $1.2 million decrease in the fiscal year 1983 budget request is comprised of an $18.5 million decline in fuel costs due to revised standard fuel prices which is partially offset by an increase of $17.3 million in program growth. The program growth is linked to the annualization of force changes begun in fiscal year 1982 plus additional force changes programed for fiscal year 1983.

Logistical support.—This program finances the Air Guard Depot Maintenance requirements to include airframe repair, engine overhaul, and repair of other major components. The fiscal year 1983 budget request is $48.6 million above the fiscal year 1982 level. This increase consists of $32.7 million in program growth and $15.9 million in price growth. Depot Maintenance program growth stems from the increased scope and type of aircraft due Programed Depot Maintenance (principally the F-4), increased ground communications equipment overhauls, and increased funding for other non-aircraft equipment overhauls caused by increased age and use of equipment.

Training support.—This program finances ANG unit level operations and maintenance activities. This includes the pay of Air National Guard technicians/civilians, operation and maintenance agreements, travel and transportation, rentals, services, supplies and equipment, recruiting and advertising, medical and security support, exercises and deployments, and major repair and minor construction.

The $66.4 million increase for fiscal year 1983 consists of $52.0 million in price growth and $14.4 million in program growth. The major programmatic changes between fiscal year 1982 and fiscal year 1983 include: mobility equipment and supply requirements for combat control, tactical control and RDJTF units; increased exercise participation, new base operating support responsibilities at Duluth, Minnesota, Hancock Field, New York, and Kingsley Field, Oregon, and communications costs for Data Automation activities.

Service-wide support.—Command administration costs are financed in this program. The $.2 million increase for fiscal year 1983 is due exclusively to price growth.

SUMMARY

The Air National Guard has proven to be an integral part of the Total Force. The Air Guard exists to support U.S. foreign policy and national security objectives, and provides a State militia uniquely qualified for missions within the United States. Our responsibilities are truly global, national, and local, and each offers its own set of challenges for the future.

The Air National Guard is ready to meet these challenges. The capability of our citizen airman to respond to the most demanding wartime missions is a matter of record. We appreciate the continuing strong support of the Congress. That support has permitted the Air National Guard to continue modernization and to make significant progress toward our goal of strength through readiness.

Senator HUMPHREY. Thank you. I think we will ask General Bodycombe for his statement first before we get into questions..

STATEMENT OF MAJ. GEN. RICHARD BODYCOMBE, CHIEF OF AIR FORCE RESERVE

General BODYCOMBE. Good morning, Mr. Chairman. Thank you for this opportunity to address you and your committee. With your permission I would like to submit a complete statement for the record and then highlight the points I believe will be of particular interest to you this morning.

I am pleased to report, sir, that the Air Force Reserve today is in its best condition in its short 14-year history, since its restructuring under Public Law 90-168. All of our units can be mobilized within

24 hours and deployed within 72. The fiscal year 1981 attained end strength of 61,565 exceeded the program strength by almost 800 personnel. We do not anticipate any difficulty in reaching the 1982 manning level. I am pleased to report this is the fourth year in a row that we have exceeded our program.

As of January 1982 all our flying equipped units were combat ready, with the exception of five which we are converting to newer aircraft. All six of our associate strategic airlift wings were combat ready.

In response to the emergency situations, our reservists enhanced the public image of the peacetime military when we saved 45 lives and relieved the plight of numerous disaster victims last year.

The Air Force Reserve's fiscal year 1983 request for O. & M. is $766 million. This is an increase of $96 million over fiscal year 1982. The increase in funding requirements includes a price growth of $18 million. This is a 10.7-percent overall growth, sir, 9.4 of which is real growth. Our program increases are the result of a full year's operation and aircraft conversions that occurred in fiscal year 1982, plus four addition aircraft conversions in fiscal year 1983. These conversions include one additional A-10 fighter squadron, one additional C-130 airlift squadron, and the relocation of two existing C-130 squadrons in conjunction with the activation of a new C-130 unit at Peterson Field, Colorado Springs, Colo., scheduled for this summer.

These conversions enable the phaseout of the last C-123 piston-powered squadron and leaves one remaining C-7 airlift squadron. This is a continuing program of modernization for the Air Force Reserve.

The price growth budget I have described is an aggregation of detailed individual calculations which involve applying inflation rates to the various commodities and services that support our O. & M. program.

Financial requirements are determined by force levels. As you know, the increasing sophistication of the equipment in our force and our increased activity rates are necessary to accomplish our mission. These include the number and type of aircraft and squadrons that I have mentioned, number of sorties and flying hours, personnel strength, numbers of our installations and the quantity and complexity of vehicles and other support equipment.

AIR FORCE RESERVE FORCE STRUCTURE

The Air Force Reserve force structure next year will consist of 35 equipped flying units, 19 nonequipped associate units, 18 squadrons of personnel and maintenance men operating and flying the C-141's, the C-9 and the C-5 aircraft assigned to the Military Airlift Command, and the new KC-10 associate tanker unit assigned to the Strategic Air Command. And we, also, will have 137 mission support combat-sustaining units.

Our O. & M. funding provides for the day-to-day operation expenses of our bases and units. It includes the pay of civilian personnel, aviation and ground fuels, depot maintenance, supplies and other expenses required to carry out our mission.

As I mentioned earlier, except for the five units undergoing conversion, all of our units are combat ready. In virtually every instance where a unit is upgraded with modern equipment, it has attained its new combat ready status in less than the normal Air Force program time.

In August 1981 the Air Force Reserve completed the largest training exercise it has ever conducted. Known as Condor Redoubt 81, it provided readiness enhancement through realistic training. And you, sir, were an observer that Sunday and we appreciate your time to come and see our people perform at Westover. The exercise tested new procedures while meeting congressional and OSD guidance to test and improve mobility and deployment capability. Equally important, it enhanced the unit confidence and morale of these great Reservists, and it demonstrated the force capability.

As you know, sir, one of the main reasons that we have been so successful in readiness in our business is our Air Reserve technician program. These dual-status individuals perform in a civilian and military capacity in their units. During the week they provide day-to-day management and administrative continuity. During active and inactive duty training periods they perform as military members of these units and are responsible for the training of other reservists.

The high skill level of our technician force, coupled with the stability that we have been able to produce with these employees are two factors critical to help us in sustaining our operational readiness. This stability is one of the major reasons we have been able to attract and retain individuals who possess the highly technical skills needed to insure our readiness.

However, we could experience difficulty in expanding our roles and missions in the future if Air Force civilian ceilings are adjusted accordingly, since these technicians are included in these ceilings.

FLYING SAFETY RECORD

In summary, sir, I have mentioned only a few aspects of our program, but I feel they are representative of the overall excellence of the Air Force Reserve during the past year. Like our good friends in the Air Guard, we are extremely proud of our flying safety record last year. We had one major class A mishap and we lost one life, one fatality, in over 140,000 flying hours, which was the best performance of all major air commands in the Air Force last year.

I will close on the same note that I began, sir. The Air Force Reserve today is truly a global force. As a byproduct of our training, our units are performing day-to-day missions for the regular force in all parts of the world. We have KC-135 crews standing SIOP alert on SAC bases. Our C-130 crews continue to provide airlift in the critical and sensitive areas of Central and South America from Howard Air Force Base in the Republic of Panama.

The Air Force Reserve is fully prepared in its peacetime mission and we are fully ready to accomplish our wartime role. Sir, I feel that is a very solid bottom line in support of our requested programs before your committee in 1983.

That concludes my statement. I would be willing to answer questions.

[The prepared statement of General Bodycombe follows:]

Prepared Statement of Maj. Gen. Richard Bodycombe, Chief of Air Force Reserve, Headquarters, USAF

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before this subcommittee to present the Air Force Reserve Operation and Maintenance program for fiscal year 1983.

The mission of the Air Force Reserve is to develop and maintain operationally ready combat units, mission support units and individuals that are available for active duty in time of war, national emergency, or other threats to our national security. To accomplish this mission, the Air Force Reserve conducts a comprehensive program of recruitment, training, and operations. The force structure consists of 35 equipped flying units; 19 non-equipped associate units, 18 flying C-141, C-9 and C-5 aircraft assigned to the Military Airlift Command and one KC-10A associate tanker unit assigned to the Strategic Air Command; and 137 mission support units.

Operation and Maintenance funding provides for the day-to-day operating expenses of Reserve bases and units, including pay of civilian personnel, aviation and ground fuels, depot maintenance, supplies, and other expenses required to carry out the Reserve mission.

The following table shows O&M, Air Force Reserve funding for fiscal years 1981-83:

[In millions]

Budget activity	Fiscal year—		
	1981	1982	1983
Mission forces	$422.4	$479.2	$543.3
Depot maintenance	70.3	80.0	101.4
Other support	106.4	110.5	121.6
Total	599.1	669.7	766.3

The increases in funding requirements in fiscal year 1983 include price growth of ($+18.7M). Program increases are the result of a full year's operation of aircraft conversions that occurred in fiscal year 1982 plus four additional conversions in fiscal year 1983. These include F-4 Tactical Fighter units, A-10 Tactical Fighter units and C-130 Tactical Airlift units. Mission increases to enhance readiness and wartime capability occur in C-141 and C-5 Strategic Airlift units, KC-10 program and Civil Engineer, Aerial Port and Aeromedical Evacuation units. Depot maintenance program growth is related to these conversions which result in more modern, sophisticated aircraft. These increases have been partially offset by decreases in units affected by the conversions. The following table shows manpower data for fiscal years 1981-83:

	Fiscal year—		
	1981	1982	1983
Military	61,565	63,736	66,600
Civilian	11,107	11,822	12,290

After reflecting the above actions, the status of Reserve units is as follows:

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AIR FORCE RESERVE FORCE STRUCTURE, FLYING UNITS

	End of fiscal year—		
	1981	1982	1983
Equipped units:			
C-130 tactical airlift	12	13	14
C-123 tactical airlift	3	1	0
C-7 tactical airlift	2	2	1
Aerospace rescue and recovery	4	4	4
WC-130 air weather service	1	1	1
CH-3E special operations force	1	1	1
AC-130 special operations force	1	1	1
KC-135 strategic refueling tanker	3	3	3
A-37 tactical fighter	1	0	0
F-4 tactical fighter	3	5	5
F-105 tactical fighter	2	1	1
A-10 tactical fighter	2	3	4
Total equipped units	35	35	35
Associate units:			
C-141 strategic airlift	13	13	13
C-5 strategic airlift	4	4	4
C-9 aeromedical evacuation	1	1	1
KC-10A tanker group	0	1	1
Total associate units	18	19	19
Total units	53	54	54

AIR FORCE RESERVE FORCE STRUCTURE, MISSION SUPPORT UNITS

	End of fiscal year—		
	1981	1982	1983
Combat logistics support squadrons	6	6	6
Aeromedical evacuation squadrons/flights	21	21	21
Medical service units	13	15	15
Aerial port squadrons	50	51	52
Civil engineering squadrons/flights	35	37	38
Civil engineering squadron (heavy repair)	1	1	1
Communications security squadrons	0	1	1
Numbered air forces (Reserve)	3	3	3
Total	129	135	137

It is with great pleasure that I report that the Air Force Reserve attained an end strength of 61,565 in fiscal year 1981, exceeding its programmed end strength of 60,754.

Also, I am proud to state that the Air Force Reserve remains ready to fulfill its mission. All Reserve units can be mobilized in 24 hours and deployed within 72 hours. The key to Reserve effectiveness has been, and continues to be, modern equipment and meaningful missions.

Modernization of the airlift equipment will continue with the introduction of our first C-130H unit at Dobbins AFB, GA, and our fourth A-10 unit at Richards-Gebaur AFB, MO. These actions and the shifting of C-130 assets will enable us to phase out some older, less capable airlift aircraft and allow us to establish ourselves at Peterson AFB, CO, which should be a very favorable recruiting area. At the close of the year, only one piston-powered unit (C-7 aircraft) will remain in the Reserve inventory. This unit will be the first candidate for modernization in the future. I would like to point out to the Committee that after the C-130H conversion, the Air Force Reserve unit at Dobbins AFB, GA, will be equipped below the minimum standard, leading to less than optimum cost effectiveness and operational efficiency.

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In the fiscal year 1981 Defense Appropriation Act, only six C-130H aircraft were designated for procurement by Congress. This is two short of the eight aircraft at our other equipped C-130 units. Because of this, two additional C-130H aircraft would be highly desirable in order to upgrade the Dobbins AFB unit to the minimum standard.

We appreciate that Congress has provided additional tactical airlift aircraft for the Air Reserve Forces. I'm referring to the 38 additional C-130H aircraft procured by Congress since 1978; however, the Air Force Reserve has received only six of these aircraft.

A logical and systematic approach for replacing seven C-130A model units in the Air Force Reserve should be established in order to prevent a crisis replacement program in future years. By the end of the present fiscal year, the C-130A model aircraft will have an average age of 24.9 years. If Congress again appropriates dollars to procure new C-130 aircraft in the fiscal year 1983 Defense Appropriation Act, these "A" model aircraft would be likely candidates for replacement.

As of January 1982, all of our equipped flying units were combat ready with the exception of five units converting to newer aircraft. These units are: One A-10 unit converting from A-37s (New Orleans); One C-130 unit converting from C-123s (Rickenbacker); One C-130 unit converting from A-37s (Youngstown); One F-4 unit converting from C-130s (Bergstrom); and One F-4 unit converting from F-105s (Carswell).

All six of our associate strategic airlift wings were combat ready. Additionally, each of the three KC-135 tanker squadrons remains in combat ready status and has crews standing daily operational alert. Along ths line, the first SAC associate unit at Barksdale AFB, LA in the newly acquired KC-10 was activated 1 November 1981, but has not yet begun reporting readiness.

As you know, one of the main reasons we have been so successful in maintaining readiness in the Air Force Reserve is our Air Reserve Technician (ART) program. These dual status individuals perform in both a civilian and military capacity in their units. During the week, they provide day-to-day management and administrative continuity. During active and inactive duty training periods, they perform as military members of the units, responsible for the training of the other Reservists. The high skill level of this technician force coupled with the stability of these employees are two factors critical to sustaining our operational readiness. This stability is one of the major reasons we have been able to attract and retain individuals who possess the highly technical skills needed to insure such readiness. However, we could experience difficulty in expanding our roles and missions if the Air Force civilian ceilings are lowered since our technicians are included in these ceilings. Consequently, we strongly endorse Air Force civilian strength ceiling adjustments to accommodate the use of technicians.

In several areas, as Reservist train, they support requirements that would otherwise have to be fulfilled by active force resources. These are called byproduct accomplishments because a productive mission is performed in conjunction with training requirements. For example, in fiscal year 1981, Reserve crews of equipped units airlifted 6,665 tons of cargo, flew 100,467 passengers and air dropped nearly 39,300 troops as a by-product of their normal training missions. In addition, Air Force Reserve associate C-141 and C-5 units flew more than 78,600 hours, and our associate aeromedical evacuation units flew more than 3,410 missions, airlifting more than 86,600 patients. We also share rotational duty in Panama with the Air National Guard in support of United States Southern Command with six C-130 aircraft and seven crews six months each year.

Reservists provided outstanding support in a new mission providing rescue support for launches and recovery of the Space Shuttle mission at Cape Canaveral, Fl. With regard to hurricane tracking, I should emphasize the fact that, for the sixth consecutive year, our weather reconnaissance group flying out of Keesler AFB, MS accomplished at least 70 percent of all hurricane missions in the Gulf of Mexico, the Atlantic and the Caribbean; last year we tracked 10 hurricanes/storms.

In fiscal year 1981, Air Force Reserve rescue and recovery units flew 80 search and rescue missions, logged over 525 hours and were officially credited with saving 45 lives. A particularly noteworthy event was the MGM Grand Hotel fire in Las Vegas where our rescue units were credited with 17 saves and one assist. Our UC-123K units continued to provide the only aerial spray capability in the Air Force. Although the C-123 is being phased out, a few UC-123Ks are being kept to provide spray capability until the completion of a research and development project to modify C-130s for aerial spray. Finally, the experience and skills of Air Force Reserve personnel are valuable assets in supporting Civil Air Patrol (CAP) programs such as cadet encampments, aerospace education workshops, and a wide variety of other special CAP activities.

Condor Redoubt 81, the fifth in a series of annual mobilization exercises, was an outstanding success. Some 59,000 Reservists participated with about 3,000 deploying to other bases. Nearly 200 Reserve aircraft were involved in the total exercise carrying cargo and people, and conducting fighter and rescue operations in a variety of locations in the United States and oveseas. Nine hundred medical personnel were part of the Reserve's most extensive training and testing of medical people and the aeromedical evacuation system. In addition, in conjuction with this exercise the initiation and implementation of the first comprehensive mobilization test of individual Reserve resources, was accomplished. Simulated messages were sent to Individual Mobilization augmentees, Individual Ready Reserve members and retired regulars; the response rate was over 97 percent.

At present, Reservists provide almost 50 percent of the aircrews and approximately 40 percent of the maintenance for MAC's C-141 and C-5 strategic airlift fleet. More than 30 percent of all tactical airlift is provided by the Air Force Reserve. Fifty percent of the crews for SAC's new K-10 tanker/cargo aircraft will be Reservists. Also with the acceptance of the A-10 fighter, Reservists are flying new first-line fighter aircraft. Currently Reservists contribute almost 60 percent of the Aircraft Battle Damage Repair personnel in six Air Force Logistics Command gained Combat Logistics Support Squadrons. The Air Force Reserve also provides 13 percent of all Air Force civil engineers, 10 percent of the Red Horse manpower and equipment, and 47 percent of the MAC aerial port personnel.

In the Air Force Reserve we have two basic resources—capital and people. People are by far the most important. Only through their dedication to the role of citizen-airmen can we accomplish our primary mission of training for mobilization. Their talent, personal sacrifice and dedication to mission accomplishment were again proven during Condor Redoubt 81. The wide scope and complexity of this exercise and the professional manner in which it was accomplished attest to our readiness and "can do" spirit as a highly capable force within our country's defense structure. With the continued contributions of time, talent, and energy, we will remain a mainstay to the American way of life.

In summary, while the wartime role of the Air Force Reserve continues to expand within the Total Force, we hope to continue to modernize our equipment, improve our management structure and recruit the people needed to assure a fully responsive, combat ready force.

Senator HUMPHREY. Thank you, General.

Those are both very optimistic reports. I congratulate you and your people on their excellent work.

General Conaway, where do we stand in the Guard on flying hours? What is the trend?

INCREASE IN FLYING HOURS

General CONAWAY. The trend is a slight increase in flying hours from approximately 410,000 to 412,000 flying hours for fiscal year 1983. This will allow our aircrews and fighter reconnaissance and interceptor units to average in the neighborhood of 135 hours per year per aircrew member, and in airlift and tanker it will be more in the neighborhood of 170 hours per member.

Senator HUMPHREY. What year is that tied to?

General CONAWAY. This is the present and the future year. We try to maintain those rates of 135 and 170 hours even as we get more aircraft and more aircrews. We are increasing from 18 F-4's to 24 F-4's at a given location, 18 to 24 A-10's at another location. And that is what most of the flying hour increase is tied to.

Senator HUMPHREY. I see.

General CONAWAY. Some of it is tied to our global support of Air Force missions, but most of that is already programed.

Senator HUMPHREY. But the hours per individual or crew will remain the same in 1983?

General **Conaway**. We try to remain the same because of the experience levels we have and the superb maintenance we think we can provide the combat-ready air crew.

Now the airlift and tanker crews basically do not need as much hands-on training as the fighter crews do, and they really do not get that. As you know, even though they get more flying time, this includes their copilot as well as their first pilot time.

Senator **Humphrey**. The 3 percent real growth request, is that simply to accommodate increased force structure, or what?

General **Conaway**. It is still within our 91 major flying units and our 244 nonflying units. It is primarily tied to conversions, like the O-2's to F-4's at Ontario and March, Calif., and, the EB-57's to F-4's at Burlington, Vt.

Senator **Humphrey**. More expensive operations.

General **Conaway**. That is right. As we get these 600 F-4's, therein lies our No. 1 reason for the growth. By converting McEntire, S.C., which was publicly announced a couple of weeks ago as the first F-16 unit in the Air National Guard, that will free up 24 A-7's that we will use for backup aircraft as well as increasing from 18 to 24 at two or three other A-7 locations.

We are keeping all those airplanes in the inventory. We are getting 24 F-16's in addition, so that is where most of the increase comes from.

SUPPORT EQUIPMENT SHORTAGE

Senator **Humphrey**. OK. What is being planned to attack the shortage of support equipment? How does that shape up in the 1983 budget?

General **Conaway**. Well, we are making some real inroads on that in the 1983 budget, as I mentioned. The Air Force is working very closely with us. We have a situation that is basically good for increased combat readiness in the country, but it does create a support equipment shortage. This is caused when you take a baseload of F-4's on an Air Force base and transfer them to the Guard or Reserve. They then get spread out into 4 locations, 24 at each guard location versus 72 to 144 at Active Air Force bases. So we need support equipment at each location. This also allows the U.S. Air Force to have a great deal more flexibility in any contingencies that might require sending Guard or Reserve units with their support equipment.

So we are gaining on it. F-4's are falling out at a fast rate. We do have a list of equipment shortages and the Air Force is helping us in the 5-year plan. We think we are going to get on top of it.

Senator **Humphrey**. Do you have a dollar figure for that shortage?

General **Conaway**. Sir, immediate shortages would be about $10 million more in support equipment for F-4's, but we do have an overall dollar figure of support equipment shortages, support equipment for aircraft, as well as ground communications and electronics. I have a list of that here, the $222 million worth of equipment, if you would like that.

Senator **Humphrey**. $222 million overall.

General **Conaway**. Yes, sir.

Senator Humphrey. Do you have a projection for the end of 1983?

General Conaway. We will have to provide that. We do make a dent in that in 1983, significantly.

[The information follows:]

Support Equipment Shortage

The present $222 million equipment shortage includes $111 million for modernization of ground communication and electronics equipment and $111 million for aircraft support equipment and ground communication-electronics equipment shortages.

The Air Force is planning to spend $38.5 million on aircraft support equipment and vehicle procurement for fiscal year 1983. No fiscal year 1983 equipment procurements are planned in the communication-electronics area.

Equipment shortages in the ANG not programmed in fiscal year 1983 consist of $5.5 million in vehicles for mobility and $67 million in ground communication-electronics. No modernization funds are programmed in fiscal year 1983 for communication-electronics; therefore, modernization needs will remain at $111 million. Projection for the end of fiscal year 1983 for equipment shortages and modernization needs is $183.5 million.

Senator Humphrey. Well, most things are programed to be corrected over 5 years. The trouble is, we never get to the end of the 5 years, somehow.

What about protective equipment against chemical or bacteriological attack?

CHEMICAL WARFARE EQUIPMENT

General Conaway. Yes, in the chemical warfare equipment, the Air National Guard has $2.6 million in the fiscal year 1982 funding. We have $3 million in the fiscal year 1983 funding. The Air Force has provided us with the funding that we need. Currently, 75 percent of the requirements for chemical warfare equipment in the Air National Guard is satisfied in fiscal year 1982, and with your continued funding support, 100 percent of our known chemical warfare requirements in the Air National Guard are satisfied by fiscal year 1983, providing that this equipment is available from the suppliers.

For example, funding is not the major problem in the Air National Guard. The suppliers' production capacity is our No. 1 problem.

Senator Humphrey. But by the end of fiscal year 1983, if the dollars stay?

General Conaway. If the dollars and the production capacity can keep up, we should be in pretty good shape in chemical warfare equipment.

HIGH PRIORITY UNITS

Senator Humphrey. What about your high priority units today?

Senator Conaway. The high priority units that we have today are our Rapid Deployment Joint Task Force units, the eight of those, plus our five units that we have that are rapid reactor units, and those units have their equipment in this area. They were the first to be equipped.

Senator Humphrey. They are all fully equipped?

General **Conaway**. To the best of my knowledge, we have geared more of the equipment toward those people, as part of our 75 percent required that we will have funded this year.

Senator **Humphrey**. General Bodycombe, what is the situation in the area of flying hours in the Air Force Reserve?

FLYING HOURS

General **Bodycombe**. Yes, sir, Mr. Chairman. We have sufficient flying hours. Our story is quite similar to the Air Guard. However, there is a perturbation that I must explain to you. We will show a 1,300 hour reduction in flying hours. That is brought about by the fact that we have been trading in 16 C-123's and C-7's for eight C-130's and 24 A-37's for 18 F-4's or A-10's.

So the amount of flying hours are there and our air crews will receive the same amount of flying hours. We just will have a lesser number of owned aircraft. The fighter pilots are receiving on the average of 135 hours. The standard figures are quite close to the Air Guard's: the C-130 crew force: 170 hours; tankers, slightly higher or 187 hours; our new KC-10 pilots, because while they may be wide-bodied pilots in commercial aviation, are not KC-10 qualified, they are up to close to 195. That will come down.

So I would answer your question by saying yes, sir, we do have sufficient flying hours to keep our crew force current and combat-ready.

Senator **Humphrey**. How much of that is simulator time? What percentage?

SIMULATOR TIME

General **Bodycombe**. Simulator time? This is all actual flying hours. But over and above that, yes, they do get simulator hours and we can get that for you.

[The information follows:]

Simulator Time

Our fighter crews are required to receive 12 hours of simulator time per year if a simulator is available to them. Those units without a simulator available fulfill their requirements using egress and cockpit procedures trainers.

We currently have two A-10 simulators for three units; with the third to be received by fiscal year March 3, 1982. By fiscal year Feb. 2, 1983 we will have converted a fourth unit to A-10's and equipped them with a simulator. Three of four F-4 units have simulators with the last programmed to receive one in July 1983. The F-105 unit at Hill AFB has a simulator.

Our tanker crews receive 21 hours per year in the KC-135 simulator and 24 hours in the KC-10 simulator respectively.

Twelve hours of simulator time per year is desired in the C-130 crew force. Currently, all of our technicians and 70 percent of our reservists meet this goal. We hope to improve on that percentage with the acquisition of four simulators from the active forces in fiscal year 1983.

Senator **Humphrey**. Is that true in the Guard?

General **Conaway**. Ours is over and above that. It is in the neighborhood of about 10 percent of what the flying hours are. If you fly 135 hours you will probably get 13 to 15 hours of simulator time, minimum.

General **Bodycombe**. The Air Force has been very good to us in the A-10 program. They have made new simulators available at

Barksdale and New Orleans. We are currently in the process of adding A-10 simulators at Richards-Gebaur AFB and Grissom AFB. The new KC-10 simulator will soon be available. American Airlines is building it under contract at Barksdale. We are doing very well in that area.

Senator **Humphrey**. Flying hours are going to remain static in 1983?

General **Bodycombe**. Yes, they will remain static.

Senator **Humphrey**. Is that satisfactory to you?

General **Bodycombe**. Yes, sir, as you well know, Mr. Chairman, 40 percent of our pilots are general aviation or air carrier pilots. The kind of flying they get to do, such a high percentage of it, is out on the line doing real world flying. They are an experienced crew force going in, and have on the order of two to three times the flying background of the regular Air Force. This is due to their great experience received on active duty, and the fact that we have been given these real world missions. There is very little of the old flagpole kind of flying that I think you are familiar with. Consequently, we feel that they are sufficient.

SUPPORT EQUIPMENT SHORTAGE

Senator **Humphrey**. Do you have the shortages in support equipment?

General **Bodycombe**. Yes, we do. Our track record is quite similar to John's because we have been sharing the regular force F-4 and A-10 fallout. The Air Force has programed a get-well date for us and we see the future looks good. We will get the kind of support equipment we need.

We are building an 11-squadron fighter force by the end of the decade, middle of the decade. Our F-16 squadron will lag John's by 1 year. We will have that up at Hill AFB, Utah. But the four A-10 squadrons are almost complete and five F-4 squadrons will be complete in about a year and a half.

Where possible, we have located our fighter units right alongside the Active Air Force. That is the beauty, I think, of what we have been able to do as a Federal entity. We have put F-4's at Homestead alongside regular force F-4's; F-4's at Bergstrom; F-16's programed alongside Active Force F-16's at Hill. So there is some symbolic relationship in sharing some of the support and equipment and the maintenance facilities.

CHEMICAL AND BACTERIOLOGICAL WARFARE EQUIPMENT

Senator **Humphrey**. OK. What about technical equipment for chemical and bacteriological warfare?

General **Bodycombe**. We have not quite as glowing a report as John's. We have an average of about 65 percent at the moment and we will have a get-well figure, my staff tells me, by fiscal year 1985. One-third of our flying is in the big strategic airplanes that are not considered in this, and we are just now getting into the fighter business.

Our portion of the RDJTF at the moment will consist entirely of the crew force that will move them. Half the crews of the large airlifters and the aerial port that will be required are Air Force reservists. So that will be our part, and it would be my great goal, as we develop our fighter force, to get in alongside the Air Guard and compete with them because they are very, very excellent units. John would have liked to have told you some of the things they did last year and the trophies they won with their fighter units. We aspire to be that good some day and we will.

Senator **Humphrey**. Is there any progress being made in a more serviceable ensemble for air crew members, particularly the pilots?

General **Bodycombe**. I am not an expert in that area but I have listened to the arguments, and it is most difficult. They are constantly cutting and sewing and learning from the equipment they have at hand and putting it to real world tests and then going back to the drawing board. The Air Force has been very diligently pursuing the ensembles in the real world, actually flying in the ensemble.

General **Conaway**. They have some real advances. I do not know when they will be out in the field for all of us, but with the F-15 and F-16, they are looking at a lot of new equipment, which we hope to obtain.

General **Bodycombe**. I think you watched a demonstration, Mr. Chairman, of the C-123 people at Westover. That is what we can do in the airlift world—return the airplane, get the crew out, put a new crew in, get it ready for another mission.

Senator **Humphrey**. I am glad to hear that there are some priorities being placed on that.

General **Bodycombe**. Yes, sir.

Senator **Humphrey**. The equipment I observed was pretty primitive. Some of it was just plain old garbage.

General **Conaway**. When it comes to things like the latest in form-fitting helmets and the latest in visors and the latest in Nomex equipment, we have the current state of the art, I think we are both very well equipped in that area, alongside the Air Force.

Senator **Humphrey**. All right, thank you very much, gentlemen.

Let me ask the representative from the National Guard Association, Maj. Gen. Francis Greenlief, retired, and Maj. Gen. Milnor Roberts, retired, and executive director of the Reserve Officers Association to come forward.

Good morning, gentlemen. Thank you for participating with us this morning. I do not know which one of you has the seniority here. I will just start with General Greenlief.

STATEMENT OF MAJ. GEN. FRANCIS GREENLIEF, RETIRED, EXECUTIVE VICE PRESIDENT, NATIONAL GUARD ASSOCIATION

General **Greenlief**. Mr. Chairman, with your permission I will submit my full statement for the record and present a 9-minute summary.

I am appreciative of the opportunity to present the views of the National Guard Association of the United States on the all-important subject of the readiness needs of the Army and the Air National Guard.

Considering the high percentage of Army and Air Force combat capability which is provided by the National Guard, it is not possible to assess the readiness of the Army and the Air Force without assessing the readiness of the National Guard.

READINESS

Since unit readiness data is classified, we cannot provide that readiness data. We can, however, assess National Guard readiness on the basis of known shortages of personnel, equipment, and items and services which have not been and are not provided by the fiscal year 1983 Army and Air Force budgets.

When the subject of readiness is discussed, the discussion normally centers on organizational clothing and equipment, spare parts, POL, ammunition, maintenance capability, training support and combat support. Generally speaking, a discussion of readiness is taken to mean consideration of those things needed by soldiers and airmen operating their equipment in training or combat.

However, when one considers the antiquity of much of the National Guard's equipment and absolute voids of some items of equipment, any discussion of National Guard readiness must address the equipment problem.

Since we will have the opportunity to address the equipment issue in a statement to the Subcommittee on Tactical Warfare, I will not further belabor the subject here.

DOCTOR SHORTAGE

There is one area of personnel shortage that is so severe and so vital to combat capability that it must be mentioned in any discussion of readiness, and that shortage is the Army National Guard doctor shortage. The doctor shortage is real and is a deterrent to readiness. We will address that issue in testimony before the Subcommittee on Manpower and Personnel.

Soldiers and units cannot fight effectively unless they are provided with the required organizational clothing and equipment. It has been said and quite accurately that the Army National Guard is a summertime Army because they do not have the required winter clothing. If war comes, it had better be in the summer or in a warm climate because the Guard and Reserve half of the Army would be down with frostbite and pneumonia.

The Army Guard requirement for chemical defense equipment is $102 million, and of that requirement, only 10 percent is on hand.

The fiscal year 1983 O. & M. Army Guard budget requests $144.4 million for organizational clothing and equipment. If that request is fully funded, the shortage at end fiscal year 1983 will be about $268 million. We urge that the fiscal year 1983 O. & M. Army Guard budget be increased back up to the fiscal year 1982 level of $187 million.

The fiscal year 1983 O. & M. Air Guard budget includes a $4 million increase over the fiscal year 1982 for organization clothing and equipment, but at end fiscal year 1983 only 60 percent of the Air Guard cold weather clothing equipment will be on hand. Considering the very early deployment time for Air Guard units, nothing less than 100 percent fill can be considered adequate. We recommend that $11.2 million be added to the O. & M. Air Guard appropriation to buy out the full Air Guard requirement for cold weather clothing and for chemical warfare defense equipment.

The Army Guard continues to demonstrate its ability to maintain very high in-commission rates on the equipment which it possesses, but no funds are provided to stock the required parts load list to support sustained operation. Unless there is an Army stockage of parts of which we are unaware to support Army Guard units in combat, then Army Guard units could not keep their equipment operating in sustained combat.

In general, the O. & M. Air Guard budget provides adequate funds for spare parts, and permit the superb Air Guard maintenance organization to generate flying hours required by the operation and training program.

We do not believe that the antique and marginal at best aircraft of the Air Guard, for example the C-130-A's and D's and the HH-3's, could be sustained in combat operation. Also, we do not believe that the O-2's and the OA-37's could survive in a NATO combat environment. The solution to this problem should be the procurement of modern equipment for these flying units.

Mr. Chairman, it has been clearly demonstrated that there is a direct correlation between unit readiness and the number of full-time support personnel made available to units. They perform administrative, training, maintenance, and supply functions which must be performed if units of nonfull-time personnel are to be able to train effectively.

In page 7 of my full statement there is a chart that demonstrates the Army and Air Force approved full-time support requirements, the number of personnel assigned and the shortages for fiscal year 1983 and at the bottom line, the shortage of full-time support personnel in the Army Guard at end fiscal year 1983 is 14,712. The shortage in the Air Guard is 2,434.

We strongly recommend a significant increase in the number of full-time support personnel as the quickest way of improving administration, training, maintenance, and supply functions—in short, the readiness of Guard units.

In testimony before the Readiness Subcommittee of the House Armed Services Committee, both General Conaway and Bodycombe opposed the provisions of the DOD Appropriation Act which would deny entitlement to pay for military service required by law, and our association joined both Generals Conaway and Bodycombe in that opposition.

A member of the National Guard or the Army or Air Force Reserve who had been paid the maximum under the Appropriations Act ceiling might be required to perform military duty under pain of court martial for failure, without entitlement to pay. Similarly, a member incapacitated as a result of a line of duty injury could not be paid while hospitalized.

Our opposition is moreover, based upon a broader principle. We objected in the past, and the Congress joined us in that objection, to efforts to place a pay cap upon Federal employees, including National Guard technicians who performed required annual training while on military leave from their civilian employment.

Now the technician, like the so-called weekend warrior, performs his military training or duty in addition to putting in his 40 or so hours in civilian employment. A guardsman and a reservist should receive pay of his grade for the duty he performs, irrespective of how he is compensated or by whom for other services. A technician who performs the duty covered by his job sheet should be paid for that work no matter how he spends his weekends. The Appropriations Act provision violates that fundamental principle in our view should be promptly repealed.

Mr. Chairman, the Army and the Air Force cannot expect to accomplish their wartime mission unless the Army and the Air Guard can perform their wartime mission. Since the National Guard is expected to fight when, where and at least as well as the regulars, the National Guard expects to be manned, trained, equipped and supported as well as the regulars.

Again, Mr. Chairman, I appreciate this opportunity to present the views of the National Guard Association. I deeply appreciate your personal interest in the hearings you have conducted on the subject of readiness. We deeply appreciate the support provided by the Congress, and we pledge ourselves to produce readiness in keeping with the support provided. Thank you, Mr. Chairman.

[The prepared statement of General Greenlief follows:]

PREPARED STATEMENT BY MAJ. GEN. FRANCIS S. GREENLIEF (RET.), EXECUTIVE VICE PRESIDENT OF THE NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

GENERAL

Mr. Chairman, and members of the subcommittee, I am appreciative of the opportunity to present the views of the National Guard Association of the United States on the all-important subject of the readiness needs of the National Guard.

The Army consists of the Regular Army, the Army National Guard of the United States and the Army Reserve. The Air Force consists of the Regular Air Force, the Air National Guard of the United States and the Air Force Reserve.

The Army National Guard provides the following percentages of the Army's combat capability: 29 percent of the total Army personnel strength; 33 percent of the combat divisions; 73 percent of the separate brigades; 57 percent of the infantry battalions; 41 percent of the mechanized infantry battalions; 43 percent of the armored battalions; 57 percent of the armored cavalry regiments; 51 percent of the field artillery battalions; and 30 percent of the aviation unit, and equally higher percentages of other combat organizations of the Army.

The Air National Guard provides the following percentages of aircraft by mission areas: 27 percent of the total Air Force; 42 percent of electronic warfare aircraft; 66 percent of defense interceptors; 57 percent of tactical reconnaissance aircraft; 38 percent of tactical support aircraft; 30 percent of tactical airlift aircraft; 27 percent of tactical fighter aircraft; 17 percent of strategic tanker aircraft; and 15 percent of rescue and recovery aircraft.

Considering the high percentage of Army and Air Force combat capability which is provided by the National Guard, it is not possible to assess the readiness of the Army and Air Force without assessing the readiness of the National Guard. Since unit readiness data is classified, we cannot provide readiness data. We can, however, assess National Guard readiness on the basis of known shortages of personnel, equipment, and items and services which have not been and are not provided by the Army and Air Force budgets.

EQUIPMENT

When the subject of readiness is discussed, the discussion normally centers on organizational clothing and equipment, spare parts, petroleum oil and lubricants (POL), ammunition, maintenance capability, training support and combat support. Generally speaking, a discussion of readiness is taken to mean consideration of those things needed by soldiers and airmen operating their equipment in training or combat. However, when one considers the antiquity of much of the National Guard's equipment and absolute voids of some items of equipment, any discussion of National Guard readiness must address the equipment problem.

Since we will have the opportunity to address the equipment issue in testimony before the Subcommittee on Procurement and Military Nuclear Systems, we will not further belabor the subject here.

DOCTOR SHORTAGE

There is one area of personnel shortage that is so severe and so vital to combat capability that it must be mentioned in any discussion of readiness. That shortage is the ARNG doctor shortage.

ARNG medical units which are required by the Army in combat need 1,235 doctors to provide medical service to soldiers. The ARNG has 620 doctors assigned. Thus, the shortage is 615, a shortage of 50 percent. Shortages in the Army Reserve are even more severe. If the active duty doctor incentives are fully effective, and if the Regular Army was at 100 percent of its wartime requirement, the wartime Army would have available only 66 percent of its requirement. In combat many soldier lives would be lost for lack of medical care—many wounded and sick soldiers who could be returned to duty with adequate medical care would be lost to the Army.

Although the doctor shortage in the ANG and the Air Force Reserve is not as severe as in the ARNG and USAR, it is a serious shortage.

The doctor shortage is real and is a deterrent to readiness, and we will address that issue in testimony before the Subcommittee on Manpower and Personnel.

ORGANIZATIONAL CLOTHING AND EQUIPMENT

ARNG

Soldiers and units cannot fight effectively unless they are provided with the required organizational clothing and equipment. It has been said, and quite accurately, that the ARNG is a summer time Army because they do not have the required winter clothing. If war comes, it had better be in summer or in a warm climate because the Guard and Reserve half of the Army would be down with frostbite and pneumonia.

The ARNG requirement for Chemical Defense Equipment (CDE) is $102 million. Of that requirement, only 10 percent is on hand. We do understand that the National Guard Bureau has placed a high priority on the procurement of CDE.

The fiscal year 1982 amended OMARNG budget was increased $84 million above the fiscal year 1981 level, and the Congress added $50 million more. The fiscal year 1983 OMARNG budget requests $140.4 million for organizational clothing and equipment. If that request is fully funded, the shortage at end fiscal year 1983 will be about $268 million. We urge that the fiscal year 1983 OMARNG budget be increased to the fiscal year 1982 level of $187 million.

ANG

Although generally supported at a higher level than the ARNG, the ANG also has serious shortages. The fiscal year 1983 OMANG budget includes a $4 million increase over fiscal year 1982 for organizational clothing and equipment, but at end fiscal year 1983 only 60 percent of the ANG cold weather clothing requirement will be on hand. Considering the very early deployment times for ANG units, nothing less than a 100 percent fill can be considered adequate.

During recent testimony before this Subcommittee, the Commander of the New Hampshire Air National Guard (a KC-135 tanker unit) said that although he had 67 percent of required Chemical Warfare Defense Equipment (CWDE), he did not have one complete set of chemical defense clothing.

We recommend that $11.2 million be added to the OMANG appropriation to buy out the full ANG requirement for cold weather clothing and CWDE.

SPARE PARTS

ARNG

The ARNG continues to demonstrate its ability to maintain very high in commission rates on the equipment which it possesses. Therefore, we conclude that the funds provided for procurement of spare parts is adequate to support training. But no funds are provided to stock the required Parts Load List (PLL) to support sustained operations. Unless there is an Army stockage of parts, of which we are unaware, to support ARNG units in combat, ARNG units could not keep their equipment operating in sustained combat.

One exception to the above is the M-42 Duster Air Defense Weapon. This weapon system is so antique that parts are simply not available. They can't be maintained except by cannibalization and cannot be maintained adequately to support training.

An example of the criticality of parts supply is the OH-6 Scout helicopter. The ARNG has 355 OH-6's in its inventory. We were advised last year that the Army considered the OH-6 to be non-deployable because there were no parts to support combat operations. Since that time, the Army has been reevaluating the deployability of the OH-6, but to our knowlege no action has been taken to obtain parts to sustain the OH-6 in combat.

ANG

In general, the OMANG budget provides adequate funds for spare parts to permit the superb ANG maintenance organization to generate the flying hours required by the operations and training program. We believe the Air Force can provide the necessary parts to sustain in the first line aircraft of the ANG in combat—at least as well as Regular Air Force aircraft could be supported.

We do not believe that the antique and marginal at best aircraft of the ANG, e.g., C-130A's and D's and HH-3's, could be maintained for sustained combat operations. Also, we do not believe the O-2's and OA-37's could survive in a NATO combat environment. The solution to this problem should be the procurement of modern aircraft for these units.

FULL-TIME SUPPORT PERSONNEL

It has been clearly demonstrated that there is a direct correlation between unit readiness and the number of full-time support (FTS) personnel made available to units. FTS personnel perfrom day-to-day functions, which they will continue to perform after mobilization. They perform administrative, training, maintenance and supply functions which must be performed if units and non-full-time personnel are to be able to train effectively.

FTS personnel are provided by two separate personnel systems.

One system is the National Guard military technician system. These personnel are Federal Civil Service employees for the purposes of pay and benefits, but are managed under a unique system established by the National Guard Technician Act of 1968. All but a very few of these technicians are required to be members of the units which they serve. The technicians themselves provide an outstanding service. The maintenance technicians perform superb maintenance. But the system is less effective than it could be because of the interference of military technician unions.

The second system is the Active Guard and Reserve (AGR) system. In this system, the personnel serve on full-time military duty under title 32 (State control) in their units. This system which was instituted by the Congress is working well and provides an opportunity for program growth because there is no ceiling imposed by law as is the case in the National Guard military technician program.

The following chart demonstrates the Army and Air Force approved FTS requirements, the number of personnel assigned and the shortages for fiscal year 1983:

	ARNG	ANG
NG technicians	22,367	21,246
AGR	14,419	4,893
Total full-time support assigned	36,786	26,139
FTS requirement	51,498	28,573
Manned (percent)	71	91.5
Storage	14,712	2,434

We strongly recommend a significant increase in the number of FTS personnel as the quickest way of improving administration, training, maintenance, and supply function.

SUMMARY

The Army and the Air Force cannot be expected to accomplish their wartime missions unless the Army and Air National Guard can perform their wartime missions. The Army and Air National Guard cannot fully perform all of their missions without additional resources. Since the National Guard expected to fight when, where, and as well as the Regulars, the National Guard expects to be manned, trained, equipped and supported as well as the Regulars.

Again, I appreciate this opportunity to present the views of the National Guard Association. We deeply appreciate the support provided by the Congress and especially by this Subcommittee and pledge ourselves to produce readiness in keeping with the support provided.

General HUMPHREY. Thank you, General Greenlief. General Roberts?

STATEMENT OF MAJ. BEN. J. MILNOR ROBERTS, RETIRED, EXECUTIVE DIRECTOR, RESERVE OFFICERS ASSOCIATION

General ROBERTS. Mr. Chairman, it is a pleasure to be here this morning in the cleanup position, and I would like to highlight some aspects of my prepared statement, as well as to make some comments on some of the testimony heard earlier.

With regard to the Army Reserve, we believe the full-time manning program is not being given the attention it should and this was reflected in readiness. There is no question about that. The Army Reserve, of the seven reserve components, has the lowest percentage of full-time people, and perhaps that is a reason why the Army Reserve units in the Rapid Deployment Force, a very small percentage are at a high state of readiness. Without going into classified material, I think you will discover that is a fact. Part of the reason of course is equipment, but part is also, in my judgment, a lack of fulltime support.

The 1983 budget asks for an end strength of 3,588 full-time manning. That is over and above the technician program. But that is about 2.8 percent of the requirement. The requirement is estimated to be 6 percent, which might take another 5 years to achieve. So we believe that some questions should be asked about that and perhaps some extra funds provided at a reasonable compromise level.

TRAINING EXCERCISES

With regard to training exercises, we have heard a discussion of Capstone this morning from General Berkman. It is a fine program. However, there are 3,000 Army Reserve units, approximately, and at the rate of training, 100 of them per year with our Capstone counterpart, this takes 30 years before you get around the system. And that is not very realistic.

Also, they are planning to train with the RDF, Rapid Deployment Force, Army Reserve units on the basis of once every 3 years. That is a lot better than once every 30, but I am not sure that it gives them an adequate response either.

With regard to the appropriation for O. & M. OF $660 million, we believe that this does not reflect very much actual growth. It is primarily cost growth.

FLYING HOURS

Let us turn to the Navy. In response to questions earlier this morning regarding flying hours with Naval Reserve units, our investigations have shown that for 1983 fiscal year, the Naval Reserve funding will support only 83 percent of flight hour requirements. In the interest of mobilization readiness, we should be moving toward meeting 100 percent of these training requirements. The 83-percent level, in fact, represents a 2-percent reduction from the historically funded 85 percent of primary and mission readiness levels.

And the same information, sadly, is available with regard to steaming hours for the surface units. In 1983 they will be confined to 14 days, 7 days below the optimum level, but of even more concern, 2 days below the level set by the fleet commanders for minimum required readiness.

We believe that this committee could well do a service by asking questions about the level of funding for acquisition of C-9 aircraft for the naval transport service. There was a discussion earlier about the C-118's and Admiral Palmer mentioned that he hopes to acquire 12 C-9's that are used aircraft from the airlines.

We believe that the funding for that is less than it should be in the fiscal year 1983 program, and we believe that $55 million will be required to support this program in 1983, which is more than what has been requested.

Also, we feel that the Chief, Naval Reserve, has been shorted on the amount of money programed for recruiting. Although all the reserve components have had good successes here, the Navy is quite concerned about specialized recruiting, and we would ask that this committee consider an increase of $540,000 in their promotional program to achieve the levels that they seek, which is an increase of approximately 7,000 people in fiscal year 1983.

We also believe that the O. & M. program in the Navy does not do the job with regard to their ASW capability aircraft, and an additional $8.7 million is required in fiscal year 1983 for Naval Reserve appropriations along this line.

MINESWEEP OPERATIONS

Also, as you may know, the Naval Reserve has the only capability in the Navy for minesweep operations, and those ships are approximately 30 years old on the average. We think that the budget is $5.5 million short of where it should be for proper maintenance of this aging fleet.

In equipment modernization, we believe that the total program should be examined even more carefully than was indicated this morning. The horizontal program which they talk about is fine if we could see that it in fact actually happens. With regard to the C-9's, I have been before the Congress at least 5 years continuously, talking about the need for C-9's. The need is still there, and there is no horizontal operation going on on that one. We applaud what is attempting to be done but we suggest that we take a pretty hard look at the balance of the Naval equipment requirements.

With regard to the Air Force Reserve, I would echo what General Bodycombe has just said a few minutes ago, and that is that by no means can we afford to let a civilian cut apply to the technicians in the Air Reserve. The technicians are the glue that keeps this thing together, and although no threat has been made, we are afraid that somebody who does not know any better might say let us cut those civilians along with everyone else, which would be a disaster.

I would also suggest to you that the pay cap which was put on Air Force Reserve and Air Guard component technicians be removed, not so much because of so many people involved. As a matter of fact, in the Air Force Reserve only 32 people were involved and the money savings, $163,400, which is almost below the noise level. But the precedent is extremely adverse. If you can take a group of Federal employees and arbitrarily cut them or put a cap on them and not other people, we think this is a very bad way to go, and we would recommend that the pay cap be removed.

We also feel that if additional training money were made available for the Air Force Reserve, that they could improve their efficiency by participating in additional overseas deployments.

Finally, Mr. Chairman, we believe that the policy of OSD of counting full-time people into the Selected Reserve ought to be reviewed. It is possible that this is not quite in accordance with the directive from Congress, and we think perhaps these numbers ought to be isolated a little bit more carefully than they have been.

Thank you very much.

[The prepared statement of General Roberts follows:]

PREPARED STATEMENT OF MAJ. GEN. J. MILNOR ROBERTS AUS (RETIRED), EXECUTIVE DIRECTOR, RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

Mr. Chairman and members of the committee: It is a pleasure to have the opportunity to appear before this Committee for a presentation of the views of the Reserve Officers Association on some aspects of the proposed 1983 program for Reserve Forces. In view of the fact that the Department of Defense continues to place very great reliance on Reserve components, the status of their training, support, and structure are of vital importance as they affect Readiness of these units.

The members of this subcommittee are quite aware that pressures to maximize the efficient use of dollars devoted to defense are unprecedented, and those dollars which are devoted to the Reserve components are some of the most cost effective anywhere in the entire defense structure. For example, the Reserve components receive only about five cents of every defense dollar in direct application, but Reserves make available approximately 30 percent of our Total Force. In the case of the Army, Reserve components supply over half of the combat units available upon mobilization and they also provide 70 percent of combat service support units. It is safe to say that there is no significant contingency which may confront this country which does not require fast and effective use of Reserve Forces.

In consideration of the above facts, we believe that this Subcommittee should examine provisions for the Reserve very carefully and demand answers to questionable budget shortages which adversely effect the efficiency of these units.

ARMY RESERVE

As you know, the total obligational authority (TOA) requested for fiscal year 1983 appropriations supporting U.S. Army Reserve activities is nearly $2-billion, which represents an increase of 15 percent over fiscal year 1982.

The appropriation request for Reserve Personnel Army of $1.225 billion is necessary to support a projected paid drill and trainee end strength of 251,680 by fiscal year 1983. Included in the budget request are monetary incentive programs supported by the Congress which will continue to be a significant tool in increasing Army Reserve enlisted paid drill strength; channeling of new members into high priority units for six years; and attracting qualified high school graduates to enlist in critical skill positions in any unit. In fiscal year 1981 the program resulted in 5,580 soldiers enlisting for $1,500 cash bonuses and 3,490 enlisting for educational assistance of up to $4,000. We believe that the Congress should continue to support strongly this two-pronged bonus/educational assistance program which attracts qualified applicants who are upgrading the readiness status of the Army Reserve troop units; at the same time this program helps improve retention.

The full-time manning program, as a part of full-time unit support, is an area of continuing concern which we believe needs greater attention. Although the program shows material increases in full-time personnel, from 821 in fiscal year 1980 to a projected full-time manning strength of 3,588 in fiscal year 1983, the Army Reserve, historically has had the lowest percentage of full-time personnel supporting units among all service Reserve Components. In view of the very positive effect of the program on unit readiness and on the efficient use and management of Reserve resources, we would urgently recommend that an even higher priority be placed on correcting the deficiency by further increasing the number of full-time unit support military personnel assigned to Army Reserve Units.

The Capstone program has proven to be a most beneficial Army initiative. The program aligns Reserve Component units based on United States Army Europe's wartime requirements in order to develop a methodology that permits Active Component and Reserve Component units to train and plan in peacetime with the command they will deploy and fight with in wartime. This single initiative has focused training on wartime mission and has certainly improved Reserve Component readiness. We are very much concerned that this most important training program and others such as the scheduled Gallant Eagle Exercises which develop readiness to the sharpest degree, will be endangered by restricting the level of training travel funds needed to fully implement the Capstone program. To our knowledge current travel funding supports Capstone training for some 100 Reserve units—at this rate it would take an inordinately large number of years for meaningful implementation of the program. We would urge that current travel fund levels for training support be significantly increased so that each unit has the opportunity to train with its active component associated unit at least once every three years. For those units with a Rapid Deployment Force mission, this readiness training should be budgeted annually.

We believe that the fiscal year 1983 O. & M. Appropriation of $686 million, and the Military Construction Appropriation of $43 million are sufficient to maintain the current level of Army Reserve programs. We are proud of the significant support by the Congress which has resulted in definite improvements in the force structure, manning, equipping and training of the U.S. Army Reserve. It is critical with the dependence of the Total Force on a combat ready Reserve Component, that this support and understanding of the unique problems of the Reserve continue in the future.

NAVAL AND MARINE CORPS RESERVE

In general, ROA is quite pleased with the fiscal year 1983 O. & M. budget proposed for the Naval and Marine Corps Reserve. Both submissions reflect real growth which is absolutely essential if we are going to increase the readiness of our Reserve Components to the level required for effective mobilization.

In the case of the Naval Reserve, however, a close look at the O. & M. Naval Reserve submission still reveals some problem areas. The real growth of 11.2 percent is planned almost entirely to support increased ship maintenance associated with the introduction of the FF-1052 class frigates into the Naval Reserve Force. Steaming days per quarter are still constrained to 14 days, 7 days below the optimum level, but of even more concern, 2 days below the level set by the fleet commanders for minimum required readiness.

A similar situation prevails in the flying-hour program. The programmed O. & M. Naval Reserve funding will support only 83 percent of flight hour requirements. In the interest of mobilization readiness we should be moving toward meeting 100 percent of these training requirements. The 83-percent level, in fact, represents a 2-percent reduction from the historically funded 85 percent of Primary Mission Readiness level.

Another major deficiency for fiscal year 1983 is lack of funding to operate or support the additional C9 aircraft planned as replacements for the ancient C-118s. For the past several years, Congress has funded a minimal flow of C9Bs to support modernization of the Navy's Organic tactical airlift capability. However, for fiscal year 1982, even though several C9s were originally authorized by both Houses of Congress, due to unusual circumstances, none were contained in the final authorization. Since the need to maintain this capability has long been recognized as a most critical immediate need, the Navy is planning to lease a minimum of eight C9 aircraft, starting in fiscal year 1982, out of existing funding. An estimated $55 million will be required in fiscal year 1983 O. & M. Naval Reserve funds, however, to support these aircraft.

Another problem facing the Naval Reserve in the fiscal year 1983 budget is a continuation of reduced recruiting funding originally levied in fiscal year 1982. The anomaly of reducing recruiting funds while at the same time increasing recruiting requirements is unusual, to say the least. The pressures to continue to increase the size of the Naval Reserve over the next several years will, in all probability, continue. The immediate requirement is an increase of 7,000 personnel. Nevertheless, the Chief of Naval Reserve will have an approximate $1.8 million shortfall of funds for recruiting purposes in fiscal year 1983. This total shortfall is about equally split between the O. & M. and RPN appropriations. For example, the fiscal year 1981, $965 thousand. This makes no sense! Recruiting advertising cannot be cut off and on like a water spigot, depending on perceptions of the market. Private industry fully appreciates this fact. No matter how successful Coca-Cola sales are, for example, they maintain a constant or increasing level of advertising. To do less results in quickly dropping sales. The Naval Reserve is tasked to significantly increase "sales," while their advertising budget is being reduced significantly. ROA recommends that, as minimum, fiscal year 1983 recruiting advertising funding be increased by $540 thousand.

Over the past few years, Congress has provided significant momentum to the modernization of the ASW Capability of Naval Reserve land-based patrol aircraft, although, like the C9B aircraft, TACNAVMOD fell victim to some unusual procedures during Conference Committee actions on the fiscal year 1982 DOD authorization. Nevertheless, an additional $8.7 million is required in the fiscal year 1983 O. & M. Naval Reserve appropriation to install aircraft modification kits which have already been authorized and funded. The funding for installation of these aircraft modifications was deleted at some level in the fiscal year 1983 budget process.

Similarly, a reduction of $5.5 million in the MSO overhaul and maintenance budget was effected during the fiscal year 1983 budget process. While $20 million still remains for this purpose, the additional $5.5 million is essential to properly maintain and overhaul these over 30-year-old ships.

The fiscal year 1983 O. & M. budget submission contains inadequate funding for the Naval and Marine Corps Reserve to meet the Congressional Containment policy of no further growth above the fiscal year 1978 level of backlog of non-defendable Maintenance and Repair. Accelerated deterioration and inflation will drive both services to levels approximately 70 percent above this mandated level.

Equipment modernization, although not O. & M. funded, must be accomplished if readiness is to improve. Equipment compatibility between the Reserve and Active Force must be attained in order to achieve effective support and maintenance. This problem is particularly critical in the Naval and Marine Corps Reserve Carrier Air Wings. In general, our aircraft carriers to which these Reserve Units would mobilize cannot support the Reserve aircraft now being flown. The Navy and Marine Corps are working hard to bring new aircraft into the Reserve Components while at the same time delaying retirement of older aircraft from the active force. Such a horizontal equipment utilization policy will go far towards eliminating the incompatibility problem and ROA urges strong Congressional support of these efforts.

With the exception of five units converting to new aircraft, all Air Force Reserve units are combat ready. In August 1981 the Air Force Reserve completed the largest mobilization training exercise it has ever conducted. This exercise, CONDOR REDOUBT 81, proved conclusively that the Air Force Reserve is ready.

However, this does not mean that the Air Force Reserve has no problems. One of the main reasons the Air Force Reserve has been so successful in maintaining readiness is the Air Reserve Technician (ART) program. These dual status individuals provide the day-to-day management and continuity of the units. While performing in their civilian capacity as military members of the units, they train other Reservists during active and inactive duty training periods. The high skill level and stability of these employees is critical in sustaining the Air Force Reserve's operational readiness. We are concerned that the manning of this crucial program will suffer if the Air Force civilian ceilings are lowered, since the technicians are included in these ceilings. With the unit conversions to more modern aircraft scheduled for 1983 it is essential that military technicians be excluded from civilian ceiling constraints.

A related issue is the technician "pay cap" imposed by the fiscal year 1982 DOD Appropriations Bill. This restriction, which does not apply to other Federal Civil Service employees, is unfair to the ARTs who perform two distinct roles for two distinct salaries. The "pay cap" leaves little incentive for junior ranking technicians to assume positions of higher grade and responsibility, since they would have to forfeit part of their future compensation. In the interest of maintaining mission readiness, provided largely by these key management personnel, we urge the repeal of this counter-productive restriction.

With the Operations and Maintenance funds requested in the fiscal year 1983 budget, the Air Force Reserve can continue the third element of its successful program for Reserve readiness: meaningful missions, modern equipment, and realistic training. In this regard, realistic training could be further expanded if additional funds were made available for increased participation in Red Flag, Maple Flag, and joint exercises, as well as overseas deployments.

CONCLUSION

Finally, an area of concern which applies to all of our Reserve Components. ROA noted last year the newly developed OSD method of accounting for Selected Reserve manpower. We pointed out that Full-Time Support personnel and Individual Augmentees were being included in the Selected Reserve numbers in apparent violation of the statutes that define Selected Reserve. OSD is still using this procedure and pointing to significant growth in the size of the Selected Reserve. Much of this announced growth is merely the result of changing the bookkeeping and should not be viewed as a significant growth in the "real" Selected Reserve. Such accounting procedures should be stopped, not only because of the apparent violation of statutory definition, but also because of the misleading impression of improved readiness resulting from such apparent strength increases.

Thank you for this opportunity to testify.

Senator HUMPHREY. Thank you, General Roberts and General Greenlief, for your critiques of the Reserve budgets, the Reserve and Guard budgets. I think your testimony is very helpful. Unfortunately, we do not have time for detailed questioning, but let me ask you general questions.

First of all, General Greenlief, the tenor of the testimony here this morning is relatively optimistic. Based on the real numbers, do you think that is justified?

General GREENLIEF. The optimism of the witnesses this morning?

Senator HUMPHREY. Yes; about the fiscal year 1983 budget, about progress being made, particularly in the area of O. & M.

General GREENLIEF. Yes, sir, I do because of the way in which they approach it. The fiscal year 1983 budget, which they participated in designing, is designed to produce training and yes, there will be in fiscal year 1983 real gains. There are going to be real gains in strength, improvement in spare parts, some improvement in organizational clothing and equipment, and any improvement looks good.

The problem is that in today's world, the difference between training and fighting the war may be very, very short. That force can train effectively. That force, the Army Guard Force, cannot fight effectively. The reason my approach may sound a little less optimistic and a little more pessimistic is that I do not view the mission of the National Guard as a training mission any more. When we provide 46 percent of the total combat capability of the Army, then our requirement must be to prepare to go to war.

Now there is no way we can solve our equipment problems after a war starts. And if that force is for real and if that force is to be any deterrent on our enemies in the world, it needs to be equipped now.

So they are optimistic, the witnesses, in terms of what the improvements will be made in training, and I think they are great, they are doing well and they are improving, but in terms of fighting a war, the shortage is abhorrent.

Senator HUMPHREY. That is my point. We are so used to deterioration that any little improvement seems wonderful. But viewed in the context that you have just outlined, we are still falling far short of what we should be doing.

General GREENLIEF. Yes, sir.

Senator **Humphrey**. General Roberts, will you comment in the same context?

General **Roberts**. I would be glad to. The Army situation, as General Greenlief has pointed out, is quite bad in terms of equipment posture, and I could see that General Berkman could be optimistic about his numbers of Selected Reserve, and we applaud that direction in which those numbers are headed.

However, no one has said anything about one of the most severe problems of manpower, the total force really, and that is the shortage in the IRR of the Army. And that is not a subject, perhaps, of this committee, but it is one that has to be looked at very carefully because it is woefully short. The official figures you get from across the river are 197,000 short in Army IRR, when the truth of the matter is that it ought to be set at at least a half a million short. And on that subject General Berkman cannot be optimistic, but he did not mention it.

On the Navy side, the Navy has made tremendous progress, and we applaud the deployment into the Naval Reserve of the frigates and replacement of the old destroyers. And we applaud the new maintenance shops which we are getting and their general progress.

We do not believe that testimony with regard to the number of flying hours is realistic or the steaming time. Those are the two things which we fault the Navy on.

Senator **Humphrey**. I think you brought out a good point and I have asked Mr. Donley to submit questions to all the relevant witnesses which will ask them to answer in terms of percentage of requirement. That is a much better way to frame questions.

PRIORITIES OF FISCAL YEAR 1983 BUDGET

One last general question of each of you. What is your estimation or how would you evaluate the ranking of priorities in the fiscal year 1983 budget? Do you feel that O. & M. is properly getting due attention in the fiscal year 1983 budget? As you know, we have been through a period when O. & M. is often the whipping boy. It has been cut by Congress and sometimes even by the services themselves.

Do you think O. & M. is getting sufficient priority in the total scheme of things in the 1983 budget?

General **Greenlief**. Mr. Chairman, I think there has been considerable progress made, and the progress stems from the interest of this subcommittee and your counterpart subcommittee in the House. The fact that you focused on it in the authorization hearings has made it stand out.

In terms of the Active Force and their requirement to be able to respond daily, I do not know that they have gone far enough yet. The point is, if you have equipment and people, then you must be able to operate them. Gen. Lew Allen has said in testimony that they, the Air Force, have put such emphasis on so-called readiness items that now their fighter procurement program will not even offset attrition.

I think the real key, sir, has to be the balance, and that is beyond my ken to determine what it is. When you address the

Army National Guard specifically and the Air National Guard to a lesser extent, then you have to start by determining what is your greatest deficiency for readiness. If you have equipment that is not adequately supported by the parts and all the other things that you need, then obviously O. & M. is terribly important. If you do not even have the equipment, as many of our units do not, then equipment has to be the highest priority.

We have eight National Guard Divisions, equipped with the Univac 1005 ADP. That can only be maintained by civilian contractors. There is no way those civilian contractors are going to go to war. We have eight National Guard divisions that probably cannot be plugged into the Army and used, for lack of ADP. Interestingly enough, those same eight Army National Guard divisions have old 40mm "Dusters", of limited capability, and no replacement system is programed for them.

Do you suppose that means that the Army would really send National Guard Divisions into combat with these shortfalls, or does it mean they really would not send them?

The point, sir, is you have to have a balance of trained people, equipment and O. & M. support. And the Army National Guard program is not balanced. The Air National Guard program is better, but that is a hell of a way to plan to fight a war if you are plannning to win it.

Senator HUMPHREY. Again, focusing on the fiscal year 1983 budget, accepting the dollar constraints involved, do you think that the Guard units, their O. & M. budget, has received appropriate priority?

General GREENLIEF. If the intent of the budget is to support training in fiscal year 1983, then I think there is a good balance in it. If we are thinking about going to war, obviously not. The organizational clothing and equipment I mentioned must be funded. The chemical warfare defense equipment must be funded. And those things must be funded if the individual soldiers are to be used in any capacity. Those items have to be funded even if their real role is just fillers, combat loss replacements to offset the shortage in the IRR, which General Roberts mentioned.

My view is, you know, if we are really planning to fight a war, and that is ostensibly what it is all about, those O. & M. items designed to support individual soldiers must have a higher priority than they do now have. And in my testimony I made specific recommendations for add-ons.

Senator HUMPHREY. General Roberts, accepting the dollar constraints, do you think that the O. & M. portion of the Reserve budget has received appropriate priority? How do you rank it? How do you evaluate it?

General ROBERTS. I think that in the case of the Air Force Reserve, the O. & M. appears to be at a pretty reasonable level, and I do not see any major problem there.

I think the problems we have addressed with regard to the Army and the Navy are primarily money coming out of training, or in the case of the Army primarily RPA funds, rather than O. & M. funds. In the case of the Navy, yes, I think the O. & M. is short there, and I think that is the most severe problem of the three. And I am, of course, including the Marines with the Navy.

I would say that on balance, it would appear as though the program is designed best for the Air Force Reserve and next for the Army, and the Navy, I think, deserves a little more attention to O. & M.

Senator **Humphrey**. Thank you gentlemen. The record will remain open for 15 days for the submission of questions.

[Questions with answers supplied, follow:]

Questions Submitted by Senator Gordon J. Humphrey

PRESSING TRAINING PROBLEMS

Senator **Humphrey**. Gentlemen, what are your most pressing training problems? How are they addressed in this budget? What training shortfalls remain that can be executed in 1983?

General **Berkman**. Our most pressing training problems relate to our Reserve Personnel, Army appropriation in the areas of school and special training. Additional funding in these areas would enable us to improve readiness by reducing MOS mismatch and increasing exercise type training. The training support provided in the Operation and Maintenance, Army Reserve budget request is considered adequate for fiscal year 1983.

General **Walker**. Military Occupational Specialty (MOS) qualification and professional development are two of our most pressing problems in the individual training arena. From the unit training standpoint, environmental training, expanded exercise participation, staff training, and the ability to train at the highest possible level all need improvement. To support these objectives it will be necessary to upgrade local training sites and make greater utilization of training aids and devices.

This budget provides for expansion of the full-time manning program, which will provide training personnel in additional units. They will allow ARNG units to do a better job of planning and executing their training. Exercise participation and overseas deployment training will be enchanced by funds for an additional week of annual training for approximately 12 battalions. This budget also provides funds to support increased environmental training. Staff training is also provided for with the $2.1 million in special training funds, as is additional professional development at the individual level through the Key Personnel Upgrade Program (KPUP). Limited enhancement of local training sites is also provided for.

Remaining shortfalls include a need for approximately $12 million in school funds to provide for increased MOS qualification, NCO development, and initial entry programs. Additional funds are also needed for training support, as well as improvement of local training site capability. This includes training aids and devices which allow greater economies in ammunition and transportation by utilization of close-in training sites. Target systems are also needed at some training areas in order to allow for weapons and crew qualification during inactive duty training. These improvements would promote unit training at higher levels during annual training.

Admiral **Palmer**. The most pressing training problems we face are the use of outdated aircraft; need to increase formal school training; need to train Reservists away from their local training sites on weekends; and the need to perform more Special Active Duty for Training in support of fleet exercises. The budget provides sufficient funding to address two of these problems. An addition of $2 million for special Active Duty Training in support of fleet exercises could be executed. Also, the addition to the budget of $31.5 million to modernize nineteen P3A/B aircraft would be a big step in solving that training problem.

General **Crist**. Training readiness is not a severe problem in the Marine Reserve. Over the past year, training of Reserve units was rigorous and vigorous. Units were subjected to mobilization and combat readiness training. Reservists trained alongside their active counterparts from CONUS to Korea. More units got out of their training centers into the field. There are, however, some areas in which we need to improve. Training readiness is presently hampered by inadequate training facilities, a shortage of equipment, and insufficient funding for weekend away and ATD trai ing and mobilization deployment tests.

Training facilities.—The fiscal year 1983 O&MMCR budget contains adequa funding to support the maintenance and repair and minor construction projects f those 38 facilities over which the Marine Corps Reserve has responsibility. Howev there is a pressing need to replace, renovate or upgrade nearly 87 training cente in order to afford an acceptable training and habitability standard for the Reser

Unless the present rate of replacement is accelerated, some of these centers will be in use well into the next century.

The fiscal year 1983 Military Construction Naval Reserve (MCNR) program includes $11.6 million for nine projects in support of the Marine Corps Reserve, this leaves a $196 million backlog.

Increased funding for $23.7 million in the MCNR appropriation could be utilized for eight projects that are executable in fiscal year 1983 but unfunded.

Equipment shortages.—Unit personnel and training readiness is adversely affected by shortages in the aviation community, since pilot and crew training is a function of aircraft possessed and any shortfalls there degrade the overall readiness situation.

Specifically, the most critical aircraft shortages exist in the KC-130 (refueler/transport) and the AH-1 (attack helicopter) communities. With the addition of the four KC-130s appropriated through Congressional foresight in fiscal year 1982, there remains a shortfall of 17 to complete the squadron at Glenview, Illinois and standup a second squadron at Stewart Airfield, New York. The single Marine Corps Reserve attack helicopter squadron in Atlanta only has eight of the 24 aircraft authorized. There is an urgent need to increase the helicopter anti-tank capability in the Marine Corps and this is an ideal mission of the Reserves. Funding to add additional AH-1 aircraft into the Marine Corps Reserve could not be accommodated in the fiscal year 1983 budget.

Weekend Away and ATD training.—The fiscal year 1983 O&MMCR Appropriation includes a request for an increase of $447,000 for commercial hire of vehicles, transportation costs, fuel, consumable supplies, and repair parts to support the weekend away and ATD training program.

Mobilization deployment tests.—The fiscal year 1983 O&MMCR Appropriations includes $1,000,000 for airlift to conduct Mobilization Operational Readiness Tests. There is a requirement for $200,000 in fiscal year 1983 for additional mobilization deployment tests.

General **Conaway**. The Air National Guard's most pressing training problems involve retraining personnel into critical skill areas. A retraining program began in fiscal year 1982 and funds are included in the fiscal year 1983 request to continue this initiative. Funds are needed to insure this training is accomplished either through formal schools when required or through a home station training program. While there remain certain unexecuted critical skill retraining programs in fiscal year 1983, the limited availability of Technical Training School spaces prevents us from conducting additional formal retraining other than identified in the fiscal year 1983 budget.

General **Bodycombe**. Our most pressing training problems in fiscal year 1982 and fiscal year 1983 concern the timely conversion of all units undergoing activation, equipment changes or manning increases. The training needed to support these conversions is reflected in our request for increases in Special and School Training funds. To preclude having training shortfalls in fiscal year 1983, I strongly recommend approval of our budget request.

O. & M. IMPROVEMENTS NEEDED

Senator **Humphrey**. What O. & M.-related improvements do you most want for your component?

General **Berkman**. The equipment shortage in USAR units is the most critical problem today. Although progress is being made with funding provided in fiscal year 1982 and the fiscal year 1983 budget request supports continued improvement, we will still be left with a shortage of approximately $70 million of O. & M. funded equipment. In addition to the equipment problem the status of facilities is of concern. Additional funding to reduce the Backlog of Maintenance and Repair (BMAR) would contribute to both readiness and morale.

General **Walker**. The Army National Guard (ARNG) has identified the following OMARNG improvements: additional Chemical Defense Equipment (CDE) to support contingency and training requirements; additional cold weather clothing required for the geographical area to which the ARNG unit will deploy subsequent to mobilization; additional organizational equipment that is required to provide protection in a tactical environment e.g., combat vehicle crewman uniforms and personal body armor systems for ground troops; and a myriad of items to include camouflage modules, binoculars, tentage, etc., required by units to support operations. There is an urgent requirement within ARNG for secure communications between the State National Guard Headquarters, State Area Commands, and mobilization sites. This provides for the transmittal of classified information necessary premobilization and post-mobilization operations. There is also a shortage of travel funds to transport certain ARNG units to training sites during Inactive Duty Training (IDT), thus restricting the use of tank and artillery firing ranges during IDT.

There is a shortage of Mandatory Parts List (MPL), providing a prescribed load of combat essential repair parts to sustain and support field operations for 15 days. All ARNG combat/combat support units required for mobilization/deployment must be combat ready with prescribed load repair parts. The availability of MPL Items is paramount to unit effectiveness in a combat operation area. An alternative source for repair parts for this urgent operational support requirement does not exist. Without on-hand MPL items, the essential maintenance of equipment during the first 15 days of combat operations will be limited generally to cannibalization as a primary source of repair parts.

Admiral Palmer. The following unfunded requirements are prioritized for improvement of Naval Reserve Readiness in fiscal year 1983:

	Thousands
Lease of 8 used DC-9 aircraft	$52,300
(To sustain Naval Reserve organic aircraft capability in light of C-118 phase-out in fiscal year 1985.)	
Recruiting: increased strength	1,890
(Provides funding for 36 additional TEMAC Recruiters and increased costs to accommodate Congressional direction of increased Selected Reserve strength.)	
Pay and allowances: 36 recruiters[1]	820
Training	110
Support costs	390
Advertising	540
ADP support	30
Aircraft modification installation program	8,700
(Provides funding for the installation of operational and safety-oriented modifications in existing Naval Air Reserve aircraft, i.e., C-130 SLEP, continuation of P-3 TAC NAV MOD, and other scheduled A/C modifications which are not funded.)	
MSO ship maintenance	5,500
(Provides funding for increased scope of MSO overhauls necessary for continued operation through the 1990's (MSO Retention Program).)	
Maintenance of real property (MRP)	11,000
(To reduce the backlog of maintenance and repair from a projected $38 million to $27 million. While not reaching the Congressional containment level of $20.7 million this funding will significantly improve the facility condition of the physical plant enchancing training, logistic and maintenance support while promoting a greater readiness posture.)	

[1] MPN funding.

General Crist. The priority for O. &. M. improvements would have to be directed toward training and mobilization readiness; specifically in the areas of organization and individual equipment, readiness deployment testing, weekend away training, and exercise support. To be realistic, however, $2.7 million is the maximum we believe could be added in fiscal year 1983 to achieve meaningful readiness enhancement and still be fully executable.

General Conaway. The Air National Guard's fiscal year 1983 O. & M. budget request supports its current programed mission requirements. Unforeseen changes later on may force requirements to outpace availability funding, but at the present time we consider the Air Guard's O. & M. program to be adequate.

General Bodycombe. O. & M. improvements are well within reason for the Air Force Reserve. Equipment shortages are programed for fill during the normal 5-year cycle. Any equipment shortages are similar to the Active Air Force and are not unique to the Air Force Reserve.

IMPEDIMENTS TO IMPROVEMENT

Senator Humphrey. What are the major impediments to such improvements? Policies? Dollars? Lead times? Organizational barriers?

General Walker. With exception of camouflage modules, the greatest single impediment to making improvements in this area is dollars. However, lead times have an effect on the capability of the wholesale supply system to support the ARNG as well as the total Army.

General **Berkman**. The major impediment is dollars. Of course, in the area of equipment funded by O. & M. lead times are also critical because of the one-year availablity of the appropriations.

Admiral **Palmer**. Maintenance of Real Property is constrained by both dollars and lead times. Additional funding of $17.0M is needed to reduce the Backlog of Essential Maintenance and Repair to the fiscal year 1978 containment level of $20.7 million. Due to the advance planning and design effort which requires both lead time and funding, only $11.0 million of additional funding MRP can be executed in fiscal year 1983. In the other areas, limited funding is the only constraint.

General **Crist**. The major impediment to Operation and Maintenance improvements is funding constraints. The improvements for aircraft are constrained by dollars and long lead times required to complete procurement action. The major impediments to training facility improvements are funding availability and lead times required for engineering and contracting services.

General **Conaway**. Given the adequacy of the Air Guard's fiscal year 1983 budget request, we do not believe that there are any major impediments to achieving our programed mission objectives.

General **Bodycombe**. There are no major impediments to improvements which result in readiness degradation for the Air Force Reserve.

Questions Submitted by Senator John W. Warner

CHEMICAL DEFENSE

Senator **Warner**. What do you regard to be the state of your respective forces to conduct military operations in a chemically contaminated environment?

General **Berkman**. The total USAR force currently is not adequately equipped to conduct military operations in a chemically contaminated environment. In fiscal year 1983 the USAR should complete readiness issues of chemical defensive equipment for USAR units in the RDF and all of the early deploying D to D+60 forces. Funds are programed in manageable increments to equip the remainder of the force by fiscal year 1984.

General **Walker**. At present the Army National Guard (ARNG) has 10 percent of its required chemical defense equipment on hand or on order. Priority of fill is to early deploying units. With these shortages, it is clear that the ability of the ARNG to conduct sustained operations in a chemical environment is limited.

Improvement on the current chemical defense equipment (CDE) shortages is a priority objective. Funds have been identified in the fiscal year 1982 budget to purchase or place on order sufficient CDE to provide contingency stock for the ARNG's D to D+30 force and training stock for the remaining force. I anticipate having the entire required equipment on hand by the end of fiscal year 1985. This will provide a significant capability to operate in a chemical environment.

We have recently actuated five divisional nuclear, biological chemical (NBC) companies and have additional activations scheduled in fiscal year 1982. Evaluation of NBC training has shown significant improvements over the last 3 years. A recent innovation in chemical defense training is the medical professional training program. Our objective is to train two or three physicians, nurses, or physician assistants in each State to provide a nucleus for conducting training at State level. I expect to accomplish this by the end of this fiscal year. As a matter of interest, two members of the Virginia National Guard, Doctors Rose and Hubbard, were in our first 16-hour class completed earlier this month.

To summarize, I am very concerned about our status in this area but see real long and short term improvement in the ARNG's ability to cope with the introduction of chemical weapons to the battlefield.

Admiral **Palmer**. In responding to this question, I will paraphrase the Navy's statement for the record before the Subcommittee on Theater Nuclear Forces. Today, with the exception of our submarines, our ships have only a moderate capability to "survive" a chemical attack. Moreover our ability to continue combat operations in a chemically contaminated environment is marginal.

General **Crist**. The Marine Corps' capability to fight in a chemical environment is limited by past program deficiencies, particularly in equipment procurement, and the lack of skilled personnel to maintain an effective NBC program. As a result of recent initiatives the present Marine Corps program reflects funding to correct deficiencies in both individual protective equipment and detection, warning and decontamination devices. The provision of trained NBC specialists to the Reserve division, wing and FSSG headquarters, as well as extensive use of mobile training teams which teach NBC defense, will enhance both NBC training and operational effectiveness. Our capability, although limited now, is improving and is expected to be satisfactory by the 1987–88 time frame.

General BODYCOMBE. The Air Force Reserve is an integral part of the operational war plans of the Air Force under Total Force Policy. Our ability to operate under the above conditions is identical to that of our gaining command upon mobilization.

General CONAWAY. Our forces could only maintain an effective chemical posture for a short period of time due to the limitations (e.g. heat burden) of the chemical protective suits. We would expect a 30–50 percent degradation in our tactical combat forces, tanker forces, and ground support personnel, depending on the temperature and degree of contamination. The main limitations involve equipment shortages such as eye-respiratory equipment for aircrews and protective masks for ground personnel. We expect sufficient aircrew equipment to be available by the end of 1982 so that training can commence, and all aircrews should be trained by January 1984. Groundcrew training and qualification is dependent on equipment procurement, a problem being worked intensively by the Air Force and air National Guard staffs.

CHEMICAL DEFENSE

Senator WARNER. What do you think the prospects would be of them having to do so should they be called upon to reinforce active forces engaged in a combat situation instigated by the Soviet Union or its proxies?

General BERKMAN. The total USAR force currently is not adequately equipped to conduct military operations in a chemical/nuclear environment. Major problems exist in the availability and procurement of chemical and radiological monitoring equipment to fill current USAR shortfalls, in all types of units, as well as meet additional requirements required by end fiscal year 1984. These problems are further expanded by the availability of two and one half ton water trucks required to sustain decontamination operations conducted by USAR NBC Defense and Decontamination units. Other shortages will continue concerning availability of 5 Ton Cargo trucks for these same units and ¼ ton trucks and trailers for Smoke Generation units. However, even though major problems do prevent USAR units from attaining full deployment capability by end fiscal year 1983, marked readiness improvements will be seen for RDF-A and NATO oriented units which deploy by D+60 to conduct operations in a chemical environment.

General WALKER. Just from reading the newspapers, you can find evidence of the capability of the Soviet Union and its proxies to introduce chemical weapons into any future battle. We must plan on responding to the possible use of such weapons. This is a matter of great concern to me in preparing the Army National Guard for its various deployment missions.

Admiral PALMER. If the Reserves are called upon to reinforce active forces, we would integrate into the active force structure. Consequently, these forces, the active forces, would have a marginal ability to conduct operations in a chemically contaminated environment.

General CRIST. Soviet military doctrine envisages the use of chemical weapons and acknowledges their value, particularly when used in massive quantities and in surprise attack. The Soviet Union and its allies are well prepared to wage chemical warfare and to fight in a chemically contaminated environment. Further, the Soviets are using, or sponsoring the use of, chemical agents and or toxins in Southeast Asia and Afghanistan. Accordingly, we expect to have to operate in a chemically contaminated environment if engaged in a combat situation instigated by the Soviet Union or its proxies.

General BODYCOMBE. All Air Force Reserve units are tasked to be mobilized in 24 hours and deployed in 72 hours. All units maintain the same readiness and training standards as active force units and would be integrated into their forces upon mobilization.

General CONAWAY. We view this as a real and dangerous possibility, and are therefore very concerned with our capability. We will continue to push for equipment procurement and stress training in its use.

CHEMICAL DEFENSIVE POSTURE

Senator WARNER. How would you rate your forces' chemical defensive posture today? What about that of units your forces are designated to reinforce in the event of a war and/or mobilization? How long could your forces maintain an effective chemical defensive posture and at what cost in terms of operational readiness and combat effectiveness?

General **BERKMAN**. Based on our CDE equipment on hand versus the projected need for such equipment, I cannot rate our defensive posture very high. In regard to units that we are to reinforce in the event of war and/or mobilization, I must defer to one of the commanders of those units, General Kroesen, who has remarked that the "overall rating of our forces' chemical defense posture is unsatisfactory. Our ability to survive and continue operations is marginal". (General Kroesen's testimony to Senate Armed Services Committee on 23 Feb. 82.) Concerning how long USAR units could maintain an effective chemical defensive posture, I must state that currently we cannot maintain our forces for but a short period of time.

General **WALKER**. With the shortage of equipment I described earlier, our capability is very limited. We are placing emphasis on filling the contingency requirements of the early deploying units and on ensuring the availability of equipment for training in other ARNG units; however, in the short term ARNG units would not be able to perform effectively for [deleted].

Active forward deployed combat forces could survive an initial chemical attack in Europe; however, sustainability would be [deleted] U.S. forces in Europe have [deleted].

Admiral **PALMER**. The chemical defensive posture of the Naval Reserve is basically the same as the active forces. For either force it is difficult to determine the length of time that we could maintain an effective chemical defensive posture due to the number of variables involved. We estimate that aboard ship we could maintain an effective posture in a heavily contaminated environment for approximately 90 minutes. However, our combat effectiveness would be reduced by about 30 to 50 percent.

General **CRIST**. The Marine Corps' NBC defensive posture today, both active and reserve; is marginal but it is improving. [Deleted.]

General **BODYCOMBE**. Very limited, entirely due to equipment shortfalls. We have about 65 percent at the moment and expect to be completely equipped by 1985. We have not had a high priority for the equipment since we have a large airlift force and are just now getting into the fighter business.

Our units have adopted the training standards of their gaining major commands, and training is progressing. During Condor Redoubt 81, reserve personnel successfully demonstrated their ability to operate in a chemical environment.

General **CONAWAY**. Our forces' chemical defensive (CD) posture is directly dependent on availability of personal protective equipment and CD training. Our personnel can operate for only a limited time in a chemical environment, after which we can expect work degradations imposed by current generation equipment. The limiting factors are primarily shortages in aircrew/eye respiratory CD equipment, protective masks for ground personnel, and collective protection facilities. Sufficient quantities of eye/respiratory equipment should be on hand by December 1982. Other equipment procurement, especially that which will minimize work degradations, is a problem being worked intensively by the Air Force and Air National Guard Staffs. Initial procurement is scheduled in fiscal year 1984. The U.S. Forces that the Air National Guard will reinforce have the required current generation chemical defense equipment and are provided training that exceeds the Air Force minimum requirements.

CHEMICAL DEFENSE IMPROVEMENTS

Senator **WARNER**. What is your professional judgment about the degree to which further improvements to our chemical defensive posture alone can be relied upon to deter the Soviet Union or its allies from initiating chemical attacks upon American personnel?

General **BERKMAN**. My judgment is that we must improve our defensive posture and our offensive posture. My sincere belief is that we cannot rely on defensive measures as the sole means of deterrence, we must also have the capability to react offensively to any initiatory use of chemical weapons by an aggressor nation.

General **WALKER**. Further improvements in our chemical defensive posture are needed but alone cannot, by itself, be relied on to deter the Soviet Union, or its allies, from initiating a chemical attack. We must have both a good defensive posture and a credible retaliatory capability.

Admiral **PALMER**. In addition to improving our chemical defensive posture, we must develop and maintain a credible and effective retaliatory capability.

General **CRIST**. The fact that every Marine has a chemical protective suit may not deter the enemy's use of toxic chemical agents. Deterrence involves not only protective means but also effective means of retaliation to insure the enemy will not initiate chemical warfare.

General **Bodycombe**. Under Total Force Policy, I believe this question should be answered by agencies and/or officials involved in the evaluation and analysis of these matters.

General **Conaway**. The Air Force has made significant improvements in our chemical defense program in terms of personnel protective equipment and chemical detection equipment. It is my judgment that beginning in fiscal year 1984 when second generation equipment is scheduled for procurement, U.S. forces will be able to survive and operate effectively in a chemically contaminated environment without serious degradation of capability. However, without a significant U.S. retaliatory capability, the Soviet Union may feel that they have a tactical advantage and initiate chemical attacks on our forces.

CHEMICAL DEFENSE

Senator **Warner**. To what extent do you believe that a credible retaliatory capability is essential to an effective chemical deterrent? How would you characterize the present U.S. chemical stockpile and its availability and utility in the event your forces should be compelled to use chemical weapons in response to their use by the enemy?

General **Berkman**. I do not feel that we should match the Soviets weapon for weapon, but we must have a retaliatory capability of sufficient force to cause the Soviets to take "due regard" before initiating chemical weapon use. In regard to our current chemical stockpile, I feel it is outmoded, and far short of having a capability to give the precept of being a capable deterrent. You are aware that we have done nothing since 1969 to upgrade our chemical stocks, and the delivery systems for our current stocks are slow, cumbersome and cannot be considered as responsive to today's fast developing warfare scheme.

General **Walker**. I believe that a credible retaliatory capability is absolutely essential to deter use of chemical weapons. We must have a CW capability which will deny the Soviets the significant advantage they would gain by using chemical weapons. We must be able to retaliate with chemical weapons to reduce the incentive to the enemy's first use. He must know that if he chooses to initiate chemical warfare, he will have to fight while encumbered by protective equipment.

The current stockpile allows us only a marginal capability to conduct chemical retaliatory operations. We lack sufficient numbers and types of munitions. Additionally, we lack a suitable capability to attack near echelons and deep targets.

Admiral **Palmer**. Chemical defensive measures alone are not enough to deter the use of chemical weapons; we must also have a credible retaliatory capability. The present U.S. chemical stockpile is logistically cumbersome and of marginal military utility. Because of the logistical support associated with the current generation of chemical munitions, they are not readily available should we be required to use them.

General **Crist**. Reliance solely on improved defenses would leave the initiators of chemical warfare largely free to operate without the constraints imposed by protection; thus yielding them a major advantage and encouraging the use of chemical weapons. The current chemical weapon stockpile is inadequate to provide an effective deterent. There is a lack of sufficient numbers and types of chemical munitions. Most of the chemical munitions stockpile is in bulk agent deliverable only by limited numbers of aircraft spray tanks; much of the remainder is in ammunition for weapons being phased out. A suitable capability to attack rear echelon targets is nonexistent.

General **Bodycombe**. This question would most properly be answered by the active Air Force and I defer to them.

General **Conaway**. A credible chemical retaliation capability is absolutely essential. It is imperative that we update our deteriorated chemical munitions stockpile if we are to maintain a serious chemical deterrent. It is unlikely that our chemical weapons would be made readily available due to the logistics burden of transporting these weapons to Europe from the U.S. Our outdated chemical munitions can presently only be delivered by a few of our older tactical aircraft.

BINARY MUNITIONS

Senator **Warner**. Is it your professional military judgment that binary munitions would provide significant and needed improvements to our present chemical deterrent capability and that the introduction of these weapons is an urgent national defense priority?

General **Berkman**. I would answer your question in the affirmative. Binary munitions would provide significant improvements to our present chemical deterrent capability.

General **Walker**. Yes, it is my personal, as well as professional opinion, that binary munitions provide an important step in modernizing our chemical weapons stockpile. This would be just one improvement in an area which requires significant upgrading. I say this because of the significant Soviet chemical threat; the recent reported uses of chemical and biological weapons in Southeast Asia and Afghanistan; and the absence of an effective verifiable ban on chemical weapons. In addition, I believe we must also have a good protective capability as part of our deterrent posture. However, as important as protective measures are, alone they are totally insufficient to deter chemical use against us.

Admiral **Palmer**. Yes. Binary munitions provide significant safety, security and logistical advantages over our current unitary munitions. We view the production of binary munitions as essential to the national defense.

General **Crist**. The considerable safety, security, and logistical advantages that binary weapons offer during the entire life from manufacturing through storage and transportation, to eventual disposal, make binaries the logical choice over unitary munitions for stockpile modernization. Transportation advantages make a strategy of centralized storage and crises deployment more workable, and there is considerable flexibility in storage and control of the binary components. Introduction of binary munitions is urgently needed in order to provide a credible retaliatory capability.

General **Bodycombe**. I am not knowledgeable enough on this highly technical subject to answer the question.

General **Conway**. Binary munitions provide a significant advantage by having inert components until they are mixed just prior to release. These weapons will provide the U.S. an effective chemical weapon system since it will be designed to be used with our current tactical aircraft.

Questions Submitted by Senator Carl Levin

BACKLOG OF MAINTENANCE AND REPAIR

Senator **Levin**. Gentlemen, what is the current backlog of maintenance and repair of real property in each of the Reserve components?

General **Walker**. The fiscal year 1982 ARNG backlog of maintenance and repair beginning level is $55.5 million.

General **Berkman**. The current backlog of maintenance and repair of real property for the U.S. Army Reserve is $61 million.

Admiral **Palmer**. The projected fiscal year 1983 backlog of maintenance and repair is $38 million.

General **Crist**. The fiscal year 1983 Operation and Maintenance Marine Corps Reserve budget contains adequate funding to support the maintenance and repair and minor construction projects for those 38 facilities over which the Marine Corps Reserve has responsibility. The budget reflects a reduction of $442,000 in minor construction projects and a backlog of maintenance and repair (BMAR) of zero at end of fiscal year 1983.

General **Conaway**. The projected backlog of maintenance and repair of real property for the Air National Guard at the end of fiscal year 1982 is $23,970,000.

General **Bodycombe**. The Air Force Reserve's present backlog of maintenance and repair projects in support of real property totals $500,000. The backlog at the end of fiscal year 1982 is projected to be $400,000.

Senator **Levin**. Does this backlog increase or decrease in fiscal year 1983? For the record, please show the funding for maintenance and repair of real property and the backlog from fiscal year 1983. Also indicate the congressional containment level.

General **Walker**. The fiscal year 1983 ARNG backlog of maintenance and repair ending level is $56.6 million, which represents a decrease from fiscal year 1982 ending level of $58.9 million. The fiscal year 1983 maintenance and repair of real property funding level is $40.8 million. The fiscal year 1983 congressional containment level is $15.0 million.

General **Berkman**. The backlog for maintenance and repair of real property decreases in fiscal year 1983 from the current level of $61.0 million to $53.6 million. The fiscal year 1983 budget request includes $37.6 million for real property maintenance and repair. The Congressional containment level is $46.2 million.

Admiral **Palmer**. The backlog of maintenance repair in fiscal year 1982 increased from $36 million to $38 million in fiscal year 1983. The maintenance of real property budget for fiscal year 1983 is $28.5 million. This will result in a projected backlog of maintenance and repair of $38 million which is about $17.3 million above the Congressional containment level of $20.7 million established in fiscal year 1978.

General **Crist**. The backlog remains level from fiscal year 1982 to fiscal year 1983. The following profile displays Maintenance and Repair of Real Property funding and Backlog of Maintenance and Repair (BMAR):

FUNDING PROFILE

[In thousands of dollars]

	Fiscal year—		
	1981	1982	1983
Maintenance/repair and minor construction	$2,351	$1,548	$1,200
BMAR	171	0	0

This zero BMAR is misleading, in that real problem with Marine Corps Reserve facilities is in major renovation and construction projects which are not under direct control of the Marine Corps. There is a pressing need to replace, renovate or upgrade nearly 87 training centers in order to afford an acceptable training and habitability standard for the Reserve. Unless the present rate of replacement is accelerated, some of these centers will be in use well into the next century.

The opportunity to replace inadequate Marine Corps Reserve facilities with newly constructed joint centers is constrained by a chronically under funded military construction program for the Navy and Marine Corps Reserve. Although the program has shown some growth over the past several years, the rate of increase has not kept pace with inflation and in fact it decreases by 30 percent in fiscal year 1983. The fiscal year 1983 Military Construction Naval Reserve (MCNR) program includes $11.6 million for nine projects in support of the Marine Corps Reserve, this leaves a $196 million backlog.

This backlog consists of 15 projects which are programed, but unfunded. Additional funding of $17.0 million would eliminate the backlog of these projects. An additional 63 training centers which require replacement, renovation or upgrading are unprogramed. Funding in the amount of $179.0 million is required to support projects at these facilities to completely eliminate the backlog.

Increased funding of $23.7 million in the MCNR appropriation could be utilized for eight projects that are executable in fiscal year 1983 but unfunded.

General **Conaway**. The Air National Guard backlog of maintenance and repair increases in fiscal year 1983. Proposed fiscal year 1983 funding is $42,898,000 and the projected backlog is $427,623,000. The Congressional containment level is $28,300,000.

General **Bodycombe**. The fiscal year 1983 backlog of maintenance and repair of real property will decrease. The funding request for maintenance and repair of real property in fiscal year 1983 is $11,000,000 with a $250,000 backlog remaining. The Congressional containment level established for the Air Force Reserve backlog is $545,000.

Senator **Levin**. How much is included in the fiscal year 1983 budget to support training and travel associated with the Capstone program for the Army Reserve and National Guard?

General **Walker**. $806,000 is specifically identified to support Army National Guard participation in conferences with their Capstone headquarters.

General **Berkman**. The Army Reserve budget requests do not specifically identify dollar requirements against Capstone as a budget line item. The Capstone concept reinforces the mobilization chain of command and organizational relationship between the active and reserve components. Training and travel of USAR units and individual members of units, whether annual training or special training, is conducted with the Capstone concept as the major planning influence. Specific training initiatives such as overseas deployment training and affiliation training are being executed and are budgeted for in the standard budget terminology of annual and special training.

Senator **Levin**. With this level of funding, how many Army Reserve and Guard units will participate in Capstone training during fiscal year 1983?

General **Walker**. This level of funding will allow each mobilization entity (i.e., division, separate brigade, armored cavalry regiment, separate group, separate battalion, separate companies, and separate detachments), approximately 1,113 units, the opportunity to participate in a 3-day conference with their Capstone headquarters.

General **Berkman**. Because all USAR units are aligned under the Capstone concept all annual and special training should be considered as falling under the influence of Capstone planning. We do not plan, program or budget Capstone training per se.

Senator **Levin**. The suggestion has been made that funding for Capstone training for Army Reserve and Guard units should be increased so that each unit would have the opportunity to train with its active component associated with at least once every three years. For those units with an RDF mission, this readiness training should be budgeted annually.

Could an increase in the Capstone training plan of this magnitude be executed in fiscal year 1983?

General **Walker**. It is desirable for units with RDF missions to conduct training at some level with their active component CAPSTONE aligned units annually. However, it is impractical for these units to utilize their annual training period each year for this as they have many unit and individual training tasks which they may not be able to accomplish with their Active Component CAPSTONE units. All training is geared to prepare the units for their CAPSTONE mission.

General **Berkman**. All RDF units are currently scheduled to train under the CAPSTONE concept. These units will train either with other RDF units or against a training plan based on their RDF role. This is not to say, however, that all RDF units will train in a fully deployed RDF role.

Senator **Levin**. What would be the costs of such an increase in active and reserve appropriation accounts in fiscal year 1983?

General **Walker**. We have identified a requirement for $970,000 to support additional planning conferences.

General **Berkman**. The cost of this training is provided for in the budget request.

NRF STEAMING DAYS

Senator **Levin**. Admiral Palmer, your statement indicates that funding has constrained steaming time in the Naval Reserve to 14 days per ship per quarter, 2 days below the 16 days steaming per quarter you consider the minimum necessary for required readiness.

When was the last fiscal year you achieved the goal of 16 steaming days per quarter?

Admiral **Palmer**. Statistics on NRF steaming days have been kept since 1970 when these ships came under the operational control of the fleet commanders. Since that time, steaming days have never been budgeted above 14.7 days per ship per quarter. However, ships have frequently attained 16 days per quarter when steaming in support of fleet missions on a reimbursible basis.

NAVAL RESERVE CREW TRAINING

Senator **Levin**. What will be the impact on Naval Reserve crew training of steaming only 14 days per quarter in fiscal year 1983?

Admiral **Palmer**. Steaming 14 days per quarter or 56 days per year is adequate. This covers the period that the Selected Reserve crew will be on board including the annual 14 day active duty for training period. The remaining 6 days steaming time will be used for active crew training, ship qualification and accomplishment of required underway maintenance and logistics evolutions.

Senator **Levin**. What would it cost to increase the Naval Reserve steaming time to 16 days per quarter in fiscal year 1983?

Admiral **Palmer**. To increase from 14 to 16 days per quarter would cost an additional $3.3 million dollars.

ADDITIONAL STEAMING DAYS

Senator **Levin**. Would the Naval Reserve be able to execute the 16 steaming days per quarter you say is the minimum necessary to meet requirements?

Admiral **Palmer**. Sixteen steaming days per quarter is the Fleet Commander's requirement. The Naval Reserve Force could steam more than the present fourteen days, however, fourteen days is adequate for the training of the Selected Naval Reserve.

FLIGHT HOUR FUNDING

Senator **Levin**. Admiral Palmer, you also indicate the fiscal year 1983 flying hour program is funded at 83 percent of flight hour requirements, 2 percent below the historically funded level of 85 percent of Primary Mission Readiness level.

What was the flying hour level in fiscal year 1980?

Admiral **Palmer**. A total of 208,296 flight hours were funded in fiscal year 1980 which was at the 85 percent level.

FLIGHT HOUR REDUCTIONS

Senator **Levin**. In what aircraft communities—tactical air, ASW—will the flying hour reductions take place in fiscal year 1983?

Admiral **Palmer**. Flying hour reductions will be necessary in the areas of tactical air, ASW patrol and logistics support.

FLIGHT HOUR PMR FUNDING

Senator **Levin**. What would it cost to bring the fiscal year 1983 flying hour level back up to the 85 percent Primary Mission Readiness level?

Admiral **Palmer**. It would cost an additional $5.3 million dollars to fund the 85 percent PMR level in fiscal year 1983.

LEASING AIRCRAFT

Senator **Levin**. Is the Navy planning to lease additional C-9 aircraft in fiscal year 1982?

Admiral **Palmer**. The Navy is planning to lease used DC-9 aircraft in 1982.

DC-9 LEASE FUNDING

Senator **Levin**. Are there funds in the fiscal year 1983 budget to support these aircraft? If not, what additional funds are needed?

Admiral **Palmer**. There are no budgeted funds for the lease of DC-9 aircraft in fiscal year 1983. Approximately $52.3 million would be required to lease and support eight DC-9 aircraft. The $16.2 million in the APN appropriation for the procurement of two used DC-9 aircraft could be utilized as an offset, resulting in a funding shortfall of $36.1 million.

O. & M. FUNDING SHORTFALLS

Senator **Levin**. Does the Naval Reserve O. & M. request have any funding shortfalls in the areas of aircraft modification installation and ship overhaul and maintenance?

Admiral **Palmer**. Yes. Additional funding in the amount of $8.7 million is required for the installation of operational and safety-oriented modifications in existing Naval Air Reserve aircraft and $5.5 million for the increased scope of MSO ship overhauls associated with the retention of the MSOs into the 1990's.

Senator **Levin**. Were these funds in this area requested by the Navy Reserve from OSD for fiscal year 1983 reduced?

Admiral **Palmer**. Yes, funding constraints prevented inclusion of these programs in the fiscal year 1983 budget.

FISCAL YEAR COMPARISON OF FLYING HOURS

Senator **Levin**. For both the Air Force Reserve and the Air National Guard, how does the fiscal year 1983 flying hour program compare to the fiscal year 1981 and fiscal year 1982 flying hour program?

General **Conaway**. The comparison of the fiscal year 1981, fiscal year 1982, and fiscal year 1983 flying hour programs for the Air National Guard follows:

Fiscal year:	*Flying hours*
1981	406,620
1982	410,556
1983	412,108

General **Bodycombe**. The Air Force Reserve flying hour program for fiscal year 1981, fiscal year 1982, and fiscal year 1983, are 133,451 hours, 132,840 hours, and 131,466 hours respectively. There is a decrease of 1,985 hours between the actual fiscal year 1981 program and the planned fiscal year 1983 program. There is also a decrease of 1,374 hours between the fiscal year 1982 and fiscal year 1983 programs.

AIRCRAFT PARKING RAMP AT SELFRIDGE AFB

Senator **Levin**. What is the current condition of the aircraft parking ramp at Selfridge AFB? What are the estimated repair costs of this ramp?

General **Conaway**. The east aircraft parking ramp at Selfridge ANGB, MI is in poor condition and will soon require major repairs. A preliminary estimate of the repair costs is in the $5 to 6 million range. A more refined estimate cannot be made until engineering design is underway.

PARKING RAMP CARRIED AS BACKLOG

Senator **Levin**. Is this project currently carried as part of the backlog of maintenance and repair for the Air National Guard? When is this project currently planned for execution?

General **Conaway**. The repair of the east aircraft parking ramp at Selfridge ANGB, MI is not included in the Air National Guard backlog of maintenance and repair. This project is currently planned for design during fiscal year 1983 and execution in fiscal year 1984.

COSTS OF REPAIRING PARKING RAMP

Senator **Levin**. What would be the cost of repairing this parking ramp in fiscal year 1983? Are these funds included in the fiscal year 1983 budget? Could this project be executed in fiscal year 1983 if funding was available?

General **Conaway**. The costs of repairing the east aircraft parking ramp at Selfridge ANGB, MI are in the $5 to 6 million range. These funds are not included in the fiscal year 1983 Air National Guard Operations and Maintenance budget. Funds could be obligated for this project in late fiscal year 1983 if funds were made available and the actual project could be completed during the fiscal year 1984 construction season.

QUESTIONS SUBMITTED BY SENATOR JOHN C. STENNIS

EQUIPMENT SHORTFALLS

Senator **Stennis**. Gentlemen, this year we have made considerable progress in coming to grips with the equipment needs of the Guard and Reserve components. The report on National Guard and Reserve equipment readiness has been published for the first time, and we now have a sound basis for attacking equipment shortfalls. In light of the information published in the report on equipment readiness, I would like each of you to identify your highest priority equipment needs that are not funded in the fiscal year 1983 budget request and the funds necessary to procure this equipment.

General **Berkman**. The following equipment is needed to meet the Army Reserve's highest priority requirements. The cost data provided are based upon catalog prices from SB 700-20 as of September 30, 1981 and not procurement costs:

SHORTAGE COST

Equipment category:	*Millions*
Other support equipment/ground forces support materiel	$79.6
Communications and electronic equipment/electronics materiel	29.2
Aircraft/aircraft materiel	24.5
Tactical and support vehicles/combat and automotive materiel	246.7
Missiles/missile materiel	5.3
Ammunition, weapons and tracked vehicles/weapons, special weapons/chemical and fire control materiel	23.4
COMSEC materiel	7.9
Cryptologic materiel	2.6
Total shortage cost	419.2

These equipment shortages represent wartime requirements for Army Reserve units currently designated or recommended for designations as part of the Rapid Deployment Force-Army (RDF-A) and peacetime authorizations for the Army Reserve units that deploy between D-Day to D+30. Shortage costs do not include $68.5M for UH-60A Helicopters since the UH-1H Helicopters are on hand.

Known procurements from dedicated U.S. Army Reserve OPA fiscal year 1981 and fiscal year 1982 funding have been excluded.

General **Walker**. The fiscal year 1983 Other Procurement Army Budget does not have a separate line requesting ARNG equipment. The Army procurement program as presented is based on equipment requirements for both Active and Reserve Component units. Distribution of this equipment to both Active and Reserve Component units is made 2 to 3 years after the funds have been appropriated. Based on projected issue of equipment in the Total Army Equipment Distribution Plan (TAEDP) for fiscal year 1982 and fiscal year 1983 plus equipment scheduled for issue to the ARNG through modernization, this chart displays the ARNG's highest unfunded equipment priority needs.

CHART 1

[Dollars in thousands]

Item	Quantity	Cost
8-inch howitzers	45	$23,848
Carriers	3,146	252,685
Trucks	4,218	135,306
Trailers	3,859	38,217
Commo equipment	2,194	1,608
Artillery sighting systems	7	28
Transponder test set	50	911
Other (Med, Engr, QM)	12,423	47,418
Total	25,942	500,021

Admiral **Palmer**. Replacement medium transport aircraft for retiring C-118 aircraft is my highest priority equipment need. I estimate that a fleet of 12 new C9B type aircraft, with 1 additional pipeline aircraft, can replace the capability of the 30 C-118's being retired from the Naval Reserve. Congress has already provided for procurement of 3 of these aircraft therefore 10 additional aircraft are needed. Three other high priority equipment needs are for Security Group Equipment; Tactical Navigation Modification of P-3A/B aircraft and Cargo Handling Equipment. Funds necessary to procure this equipment are:

	Millions
C9B or 737-200QC (military version) aircraft (approximate cost each)	$25
Spares (approximate cost each)	2.1
Security group equipment (various)	4.4
P3A/B TACNAVMOD (19 aircraft)	31.5
Cargo handling equipment (various)	33.6

General **Crist**. There are three areas in which the Marine Corps Reserve has significant shortages: aircraft, equipment, and secondary items.

The most critical aircraft shortages exist in the KC-130 (refueler/transport) and the AH-1 (attack helicopter) communities. With the addition of the four KC-130s appropriated through Congressional foresight in fiscal year 1982, there remains a shortfall of 17 to complete the squadron at Glenview, Illinois and standup a second squadron at Stewart Airfield, New York. The single Marine Corps Reserve attack helicopter squadron in Atlanta only has eight of the 24 aircraft authorized. There is an urgent need to increase the helicopter anti-tank capability in the Marine Corps and this is an ideal mission of the Reserves.

With regard to materiel readiness, the Reserve is currently short $546 million in equipment, broken down as follows: Communication-Electronics—$92.6 million; Engineer—$106.2 million; Motor Transport—$127.8 million; Ordnance—$145.9 million; and General Supply $73.7 million. Secondary items shortages include: $86.5 million in consumables (non-depot repairables, repair parts, individual equipment); and $51.5 million in depot repairables (engines, transmissions, final drives, etc.).

General **Conaway**. Our highest priority equipment needs not included in fiscal year 1983 Budget request are:

Mobile radio control centers	$16.5
Tropo (Wideband) radios	107.3
Telephone systems	5.5
Comm centers	4.1
Tech controls	7.0
Satellite terminals	37.6
Vehicles for mobility	5.5
Total	183.5

General **Bodycombe**. First, let me reiterate that the Air Force Reserve is a partner in the Air Force POM process, and I fully support the Air Force input to the fiscal year 1983 President's Budget. Should there be funds appropriated over and above the formal Air Force budget request to alleviate shortfalls in Air Force Reserve equipment, the most needed items would be ECM equipment, radar warning receiver updates and instrument landing system modifications for our fighters. Cargo trucks, fuel trucks, and utility vehicles are also needed for our support units. Cost for these items would be approximately $230 million (fiscal year 1983 dollars) depending on factors such as production rates, lead times, and contract closing cost and limitations.

If additional funds were made available for aircraft procurement, the Air Force Reserve could logically and systematically phase in those aircraft as follows:

1. Increase the number of aircraft in those units which do not have the desired notional PAA.
2. Modernize fighter and airlift units that possess older, less capable equipage.
3. Increase the number of tactical airlift units in an effort to reduce the tactical airlift shortfall.

Senator **Stennis**. General Walker, please identify the high-priority equipment needed by the Army National Guard not funded by the fiscal year 1983 budget and the funds necessary to procure this equipment.

General **Walker**. Procurement requirements budgeted for fiscal year 1983 for the Army National Guard (ARNG) are an integral part of the Total Army's requirements generation process as the budget for a given fiscal year is developed. The fiscal year 1983 Other Procurement Army Budget does not contain a separate line for ARNG equipment. Distribution of equipment to both Active and Reserve Components is made 2 to 3 years after procurement funds have been appropriated by Congress. Distribution of equipment is based upon existing priorities at the time items are received, with the exception of dedicated procurement as specified by either Congress or the Army.

NAVAL RESERVE EQUIPMENT

Senator **Stennis**. Admiral Palmer, what does the Navy Reserve need most in terms of equipment to do its mission that is not funded by the fiscal year 1983 budget? What would be the cost of this equipment?

Admiral **Palmer**. What the Naval Reserve needs most is modern medium transport aircraft. They will serve the dual purpose of moving Reservists on week-ends from their local training centers to fleet sites where shipboard training can be provided or to central locations where new shipboard simulator trainers are located. These aircraft also provide the Navy a required Intra-Theatre fleet logistic capability upon mobilization. Either the McDonnell-Douglas C9B or Boeing 737-200QC (Military Version) or any other comparable aircraft would suffice. Cost of new aircraft is estimated at $22-$25M each and 10 are needed.

MARINE RESERVE EQUIPMENT PRIORITIES

Senator **Stennis**. General Crist, what equipment would you procure as a matter of priority for the Marine Corps Reserve beyound what is funded in the fiscal year 1983 budget? What would this equipment cost?

General **Crist**. Looking at 1983, I would first address the aircraft shortages. The most critical is the KC-130 refueler/transport. Procurement of about nine of those aircraft in fiscal year 1983 is a reasonable goal. This would require $193.8 million. The second critical aircraft shortage is the AH-1T TOW attack helicopter. Procurement of six aircraft, at a cost of $51.0 million, would improve squadron readiness by a third.

The next priority would be to see what could be done about correcting the material shortages, which are over $500 million right now. The addition of $104.5 million in this area would be executable in 1983. The dollars would be applied to shortfalls in communication-electronics, engineer, motor transport, and ordnance.

The third priority would be for Secondary Items. This includes such things as individual equipment, consumables and spares. I could utilize $79.5 million in that account. This will not wipe out the backlog, but certainly would make a large dent and would be executable in 1983.

Senator HUMPHREY. Thank you very much for your testimony.

[Whereupon, at 12:07 p.m., the committee was adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

MONDAY, MARCH 15, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

ARMY FACILITY AND DEPOT MAINTENANCE PROGRAMS

The subcommittee met in, open session, pursuant to notice, at 10 a.m., in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Staff present: Michael B. Donley, David S. Lyles, and José E. Martinez, professional staff members; Carol J. Rudolph, staff assistant.

Also present: Robert Nichols, assistant to Senator Jackson.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony on the Army's facility and depot maintenance programs for fiscal year 1983. We are pleased to have with us Maj. Gen. James Welch, Director of Supply, Maintenance and Transportation, U.S. Army Materiel Development and Readiness Command, and Brig. Gen. Jerome Hilmes, Deputy Director for Facilities Engineering and Housing, Office of the Chief of Engineers.

Our interest in the Army's facility maintenance program represents a continuation of last year's effort to improve the living and working conditions of our soldiers. The subcommittee believes that while additional funding in this area is certainly justified, a sustained effort to reduce the backlog of maintenance and repair is much preferred over one time infusions of money. Thus we are particularly interested in understanding the effect of proposed fiscal year 1982 supplemental funding in this area.

While the contribution of real property maintenance funding to improved readiness is sometimes ambiguous, we recognize the central role of depot maintenance programs to material readiness. Because this is the subcommittee's first detailed look at the Army's depot maintenance program, we hope to obtain an overview of organizational, workload, and management issues. Of particular interest are the Army's efforts to improve efficiency within the logistics and supply system, and their preparations to support the fielding of new equipment.

We will begin by addressing the facility maintenance program with Brigadier General Hilmes.

STATEMENT OF BRIG. GEN. JEROME B. HILMES, DEPUTY DIRECTOR FOR FACILITIES ENGINEERING AND HOUSING, DIRECTORATE FOR MILITARY PROGRAMS, OFFICE OF THE CHIEF OF ENGINEERS

General HILMES. Mr. Chairman, it is an honor and privilege to appear before your subcommittee to discuss the Army's facilities. Thanks to the support of this subcommittee in the past we have made a large step in the right direction. We have a long way to go.

REAL PROPERTY AND MAINTENANCE

On December 15, 1981, the Chief of Engineers, U.S. Army, submitted a report on real property maintenance to the full Committee on Armed Services in response to direction in Senate Report 97-58. I shall briefly review the substance of the Army's report as a point of departure for discussing facilities in general. I will explain the requirements determination process, integration of the real property maintenance submission with the MilCon budget, tracking execution of real property maintenance activities, and backlog of maintenance and repair [BMAR] by major command or region.

In the Senate report, the committee expressed deep concern over the material readiness and morale implications which follow from prolonged inattention to the living and working conditions our soldiers now experience. You correctly perceived this problem in Europe as being at a critical stage for the U.S. Army. For years, the Army has been concerned also about the consequences of facilities deterioration, but constrained budgets and shrinking buying power continued to take their toll on real property maintenance programs. Now with improved funding levels in fiscal year 1982, we expect to reduce the backlog of maintenance and repair for the first time in years.

This chart states the problem. It is comparing the requirements and the backlog and the funding for the major Army commands. The annual maintenance and repair requirement, about $937 million, is what the commands need to keep their facilities in good shape during the year. This represents what we must do during the year.

Comparison of M&R Requirements, Backlogs, and Funding

(Dollars in Millions)

MACOM	Annual Maintenance& Repair Requirements	Backlog of Maintenance & Repair[1]	FY 1982 Funding
FORSCOM	231.4	438.0	400.7
USAREUR	331.5	1,270.6	470.6
USAEIGHT	38.9	181.0	125.4
TRADOC	195.5	276.8	342.2
All Other	139.7	121.7	183.3
Total	937.0	2,288.1	1,522.2[2]

[1] Carryover from FY 1981 Based on Actual Reports from MACOMs

[2] Includes Program Supplemental of $275.0 Not Yet Approved by the Congress

Senator HUMPHREY. For 1982?

General HILMES. Yes, sir. This is the backlog of maintenance and repair, BMAR. This represents the problem. That is the best indicator I think we can give you as to how we are hurting. For instance, a large BMAR exists, $1.3 billion in Europe, $2.3 billion Army-wide. The 1982 funding is $1.5 billion, which includes the $275 million supplemental that we referred to. If we get $1.5 billion, which is considerably more than the $937 million that we need to tread water, then we can reduce this backlog. If we get this amount of money, $1.5 billion, we will reduce this backlog by about $500 million. If we do not get the supplemental, the reduction will be less.

Now, you have some pictures in some books there broken out by different MACOM's, the three black books. I know you have been to Europe, so I did not go through a lot of pictures on the screens, but if you wish to look at any particular MACOM there, pictures of the facilities that represent this backlog of maintenance and repair, they are available for your perusal.

Senator HUMPHREY. Are they classified?

General HILMES. No, sir.

Senator HUMPHREY. I would like to take them to my office after the hearing if I may. Is that all right?

General HILMES. Yes, sir.

As I mentioned, in past years the backlog has risen substantially because the dollars provided did not adequately fund the day-to-day maintenance and did not offset inflation and deterioration of the backlog. As a result, the backlog grew. This year facilities engineers everywhere are encouraged that resources are beginning to flow in sufficient quantities to get the job done.

As the Army reported to you in December, at least $432.6 million of the total funding for maintenance and repair of real property will be allocated to accomplish over 2,600 BMAR projects by 4 of the largest major commands. The other major commands are expected to spend another $25 to $30 million on BMAR work. If the supplemental budget request is appropriated, almost all of the additional $275 million for real property maintenance will be allocated to further reduce the backlog in the United States and in Korea. Only $34 million would go to Europe in light of the substantial increase they have already been allocated in 1982 over 1981. These supplemental funds are essential to achieve substantive BMAR reductions in other geographic regions.

On this chart we show you that there is more to real property maintenance activity than just maintenance and repair which we call the K account.

Operation and Maintenance, Army
Army Real Property Maintenance Activities

FY 1983 President's Budget
(Dollars in Millions)

Acct	Function	FY 1982	FY 1983
J	Operation of Utilities	681.9	700.5
K	Maintenance & Repair of Real Property	1247.2 (1522.2)[1]	1203.8
L	Minor Construction (under $100 thousand)	72.7	74.6
M	Other Engineering Support	433.4	460.5
	TOTAL	2435.2 (2710.2)[1]	2439.4

[1] Amounts in parentheses include Program Supplemental request for $275 million for facilities maintenance.

We also have other accounts, minor construction, under $100,000, and other engineering support. I have given you a copy of the charts, sir, under my statement.

In 1982, as I mentioned, we have some notable progress. The maintenance and repair accounts are larger than 1981—1981 was $913 million. With the supplemental it is the $1.5 billion that I mentioned on the previous chart. Our request today is for $2.439 billion in the RPMA accounts of which $1.2 billion will be in maintenance and repair.

I would like to pursue the maintenance and repair account further at this time. Army RPMA activities—RPMA budget estimates are formulated to support the activities of facilities engineers at military installations and activities around the world. The Army's facilities engineers operate and maintain facilities at 95 major installations in the United States, 787 installations in Europe, a Panama Defense Complex, and 152 installations in the Pacific. Each major installation is similar to a small city; that is, consisting of buildings and other structures, utilities distribution systems, roads, airfields, drainage systems, plus military training areas and ranges not found in a civilian community.

The total replacement value of all Army facilities in 1981 was approximately $137 billion. In order to operate and maintain this very substantial amount of Army real property, the facilities engineers must spend at least $2.4 billion OMA funds in fiscal year 1983.

Now this chart tries to indicate the magnitude of the problem—$137 billion worth of real property spread throughout the world in over a thousand installations, a billion square feet of real property space. With these kinds of numbers it is easy to see that you need a billion dollars to maintain and protect this $137 billion investment.

Real Property Maintenance Activities Statistics

1. Replacement Value of Real Property	137 Billion Dollars
2. Buildings (Over 200,000 Buildings)	1 Billion Sq. Ft.
3. Railroads	2,600 Miles
4. Surfaced Areas	534 Million Sq. Yds.
5. Acreage (Equal to Massachusetts, Connecticut and Rhode Island)	10 Million Acres
6. Electric Lines (6.8 Times Across the U.S.)	21 Thousand Miles
7. Water Lines (3.2 Times Across the U.S.)	10 Thousand Miles
8. Sewer Lines (2.5 Times Across the U.S.)	8 Thousand Miles

The $2.4 billion being requested will enable the Army to actually accomplish some BMAR work in 1983, but mostly in Europe. Other commands will be limited to financing their annual maintenance and repair requirements with limited funding capability to offset BMAR growth caused by inflation and deterioration.

Senator HUMPHREY. Permit me to interrupt you here. You said that the amount above the annual need of approximately a billion dollars, which would be about $1.4 billion, is going to be spent mostly in Europe, is that correct?

General HILMES. The amount above the annual need is about $500 million.

Senator HUMPHREY. What did you specify as the annual need?

General HILMES. About $1 billion, sir. On the previous chart it was $930 billion.

Senator HUMPHREY. You are requesting $2.4 billion in 1983. That is total RPMA?

General HILMES. That is the total RPMA. The K account is $1.2 billion. So, the amount above the $1 billion annual requirements, or $200 million, will allow us to attack BMAR projects, particularly in Europe.

Senator HUMPHREY. You may proceed.

General HILMES. With the money being requested, there will be visable improvements in both the living and working conditions for American soliders, with the most positive results occurring in Europe. However, the improvements will be slight compared to the total BMAR problem, and it is essential that the momentum begun in 1982 be continued through 1983 and accelerated in future years.

The final solution to the BMAR problem is still in the future, even after the significant progress expected in fiscal years 1982 and 1983.

Senator HUMPHREY. Before we go on let us talk about Europe. What is the projected backlog at the end of 1982 if you get the supplemental?

General HILMES. At the end of 1982, sir, if we get the supplemental it will be approximately $1.111 billion.

Senator HUMPHREY. What would it be at the end of 1983 under the budget submission?

General HILMES. With this budget submission it will be $1.01 billion.

Senator HUMPHREY. You are going to reduce it by approximately $100 million?

General HILMES. Yes, sir.

Senator HUMPHREY. What are the constraints involved here? Is that as much as you can expend carefully in a year or what does that reflect?

General HILMES. We can spend more than that effectively over there, sir. The reason for the reduction of only $100 million is because, as you can tell from the chart, 1983 is not that much bigger than 1982.

Senator HUMPHREY. Yes.

General HILMES. The supplemental does not carry over to the 1983 year. The increase in funding that the committees gave us last year in fiscal 1982 does not carry over into 1983 and therefore we are not making as much progress in Europe as we would like.

Senator HUMPHREY. Are you satisfied with these figures?

General HILMES. Sir, the Army is on record as having an additional requirement for $300 million in 1983.

Senator HUMPHREY. Where is the decision made on these accounts?

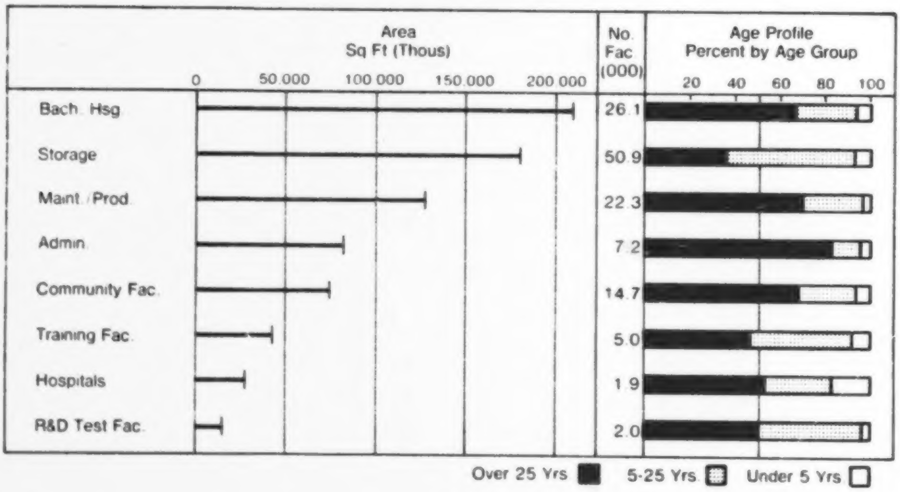
General HILMES. As the system works it's way up, through the Army staff to the OSD staff, additional deletions take place.

Senator HUMPHREY. My first reaction is not favorable, I must say, in this particular area.

Will you continue, please.

General HILMES. I would like to refer now to another chart.

Military Real Property Profile
Largest Categories of Bldgs. — Size and Age



That bar graph reflects the age profile of our various categories of buildings. For example, bachelor housing, which is troop barracks—200-some odd million square feet, or 26,100 barracks, over 65 percent of these barracks are over 25 years old. We see from the black bars that we have a similar aging problem in maintenance and production facilities, in administration facilities and community facilities. In fact, the median age of our physical plant is 35 years. These older facilities require more maintenance and repair dollars to keep them going.

I would like to talk for a moment, sir, about requirements determination process. The requirements determination process is a matter of priorities being integrated into a systematic process for developing a detailed maintenance plan.

The Army's report of last December identified real property maintenance priorities as being mission-essential projects, maintenance and repair of living and working areas, utilities systems, and work associated with the protection of our investment. Priorities are usually determined at the local installation or community level by urgency of need.

The number of installations around the world were cited earlier to give an indication of the magnitude of the ongoing activity. It is important to note that the installations vary from one another because of geographic location, size, troop population, mission, age profile of buildings, and spatial relationship with surrounding civilian communities.

The local commander and facilities engineer must plan to meet the critical needs at that particular installation and decide how to provide adequate facilities to accomplish their mission. A plan is prepared based on annual and long-range requirements and is executed based on resource availability.

BEST DOCUMENT AVAILABLE

I enter the schematic that reflects this system and the words that go with it for the record. The local base commanders must establish their program based on their need and executed based on the resources provided them and of course a large factor is the priorities at their post.

MCA INTEGRATION

I would like to move now to MCA integration. To get the proper perspective on integration of the real property submission with MCA, it is important to understand that the final President's budget request is the culmination of a rigorous planning, programing, and budgeting process spanning several budget cycles.

As the Army guidance each year is reduced to financial programs, there is considerable competition among appropriations, issues, and programs for scarce resources. There is never enough total obligation authority available to do everything that everyone wants to do. A sort of natural selection process sifts out the weaker competitors and, after many scrubs of those issues being considered, the ones with strong and compelling jusification of needs emerge as survivors.

Within the Office of the Chief of Engineers, there are both automated and manual systems to force program balance. For example, each MCA project must be justified by means of a DA form 1391. These are automated at departmental level and the data includes an estimate of the amount of BMAR that will be eliminated if the project is approved. The backlog estimates for several years have considered the effects of MCA offsets on projected carryover BMAR each year.

The rigorous process of prioritization is repeated partly at both the major command and installation levels. An installation commander or his facilities engineer would be aware if there were an MCA project already approved that would obviate the need for an OMA funded repair job. At all levels, the facilities engineers are sensitive to the integration of real property maintenance and MCA programs.

I might add that major repair projects over $500,000 come to DA for approval and we check those against MCA project listings. Also at the departmental level we have made a conscious decision to fund the annual recurring requirements first at the expense of the MCA program.

TRACKING EXECUTION

At departmental level, tracking the execution of real property maintenance activities is too macromanaged.

The operation and maintenance accounts are continually changing as literally hundreds of decisions are made weekly at every installation and community concerning minor repair jobs, work orders, and small projects. But the macromanagement being practiced this year is considerably more involved. In fact, intensified management initiatives for 1982 began 1½ years ago.

When we issued program budget guidance in October 1980, we issued guidance at that time as to priority of repair projects and to look particularly at funding large ones. In the past facilities engineers have sometimes not executed large repair projects because they consumed most of his annual budget.

In our letter of May 1981 to the major commands we reinforced our program budget guidance, again stated expectations that the backlog of maintenance would be reduced and discouraged reprograming of the RPMA funds during the year.

The Chief of Engineers sent a letter to his divisions and districts in June telling his district engineers that the facilities engineers had an expanded program, no increase in staffing, and therefore would be relying more on the districts for their design support.

As I mentioned earlier, we reported to the Congress on December 15 as to the priorities by MACOM's their plans and funding allocations. We receive quarterly reports on execution by MACOM.

We also participate in staff visits and in-process reviews of their programs.

In Europe particularly, with their enhanced program in 1982—we have just returned recently from their last quarterly review—I am happy to report that almost $100 million of projects for 1982 are in process in the European Division of Engineers and $300 million of projects for 1983 have already been or soon will be assigned. These amounts are over and above the in-house design and contracting efforts of the major subordinate commands in Europe. This constrasts sharply with 1980 and 1981 when the European division did only $2 million and $10 million, respectively, of the OMA projects.

We get a quarterly report from each major command on BMAR obligations by facility category. We also get a monthly summary of obligations by functional account by major command through the Army accounting system.

There are also other reports received periodically, the command operating budget, the prior year report and unconstrained requirements report which provide my staff the necessary information to track the program.

This chart exemplifies execution information we receive quarterly from the commands.

FY 1982 Funding Allocations Against Current Backlog[1]

(Dollars in Millions)

Facility Category	Current Backlog	# Projects[2]	Allocations to BMAR Projects[3]	Obligations Thru 31 Dec 81
Operational Facilities	$ 55.6	53	$ 5.1	$ 1.3
Aviation Opn Facilities	39.0	20	4.9	2.6
Training Facilities	61.7	63	7.6	1.5
Maintenance Facilities	226.5	284	63.8	5.9
Unaccompanied Personnel Housing/Dining Facilities	472.0	491	106.7	28.5
Community Facilities	219.3	281	28.3	7.6
Supply/Storage Facilities	185.5	180	20.5	5.3
Hospital/Medical Facilities	57.2	110	22.0	1.7
Utility Systems	431.2	679	111.8	17.4
Administrative Facilities	141.2	202	27.2	8.1
Roads and Grounds	366.5	239	33.0	10.4
Other	32.4	10	1.7	1.4
Totals[3]	$2,288.1	2,612	$432.6	$91.7

[1] Reported to the SASC, 15 December 1981

[2] Projects for Four MACOMs Only: USAREUR, FORSCOM, TRADOC, USAEIGHT

[3] Allocations Prior to Program Supplemental of $275.0

The left-hand margin is the facility category or use code. There again is the $2.3 billion backlog broken out by these facilities, and the 2,600 BMAR projects. This year, not counting the $275 million supplemental, we plan to execute $432.6 million against the BMAR projects.

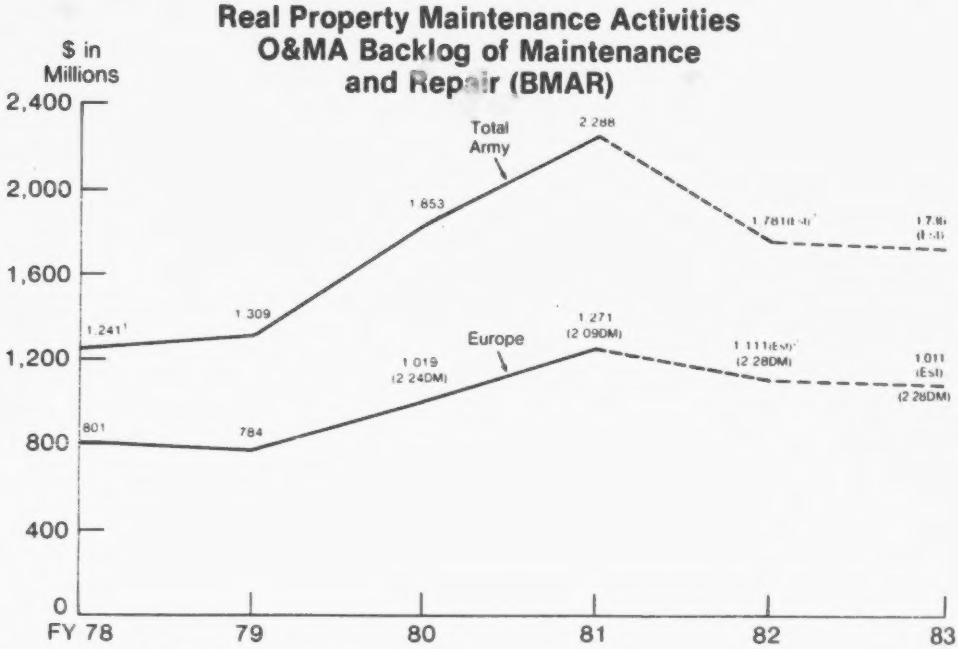
In the first quarter of fiscal year 1982, $91.7 million of these backlog projects have been obligated. This is a 21 percent obligation rate reflecting that the Army is operating under some fiscal constraints caused by the continuing resolution. Nevertheless, it is considerably higher than the previous fiscal year when at this point in time we had executed only $34 million worth of backlog projects.

I might add that we can see the greatest number of dollars and the largest number of projects are going to the very facilities that I mentioned earlier were the oldest—maintenance facilities, barracks, dining, community and utility systems and administration facilities. Particularly I would like to note that the utility systems which had been neglected for a decade or two have 679 projects totaling $112 million allocated against them. This is a very healthy sign because utility systems typically don't get fixed until they are broken. This represents a real investment in our real property system and represents the field paying attention to our priorities guidance.

Also, I might add that the MCA program for fiscal year 1983 is targeted at the same categories of facilities where we have the most backlog of maintenance and repair.

The program supplemental of $275 million requested for facilities maintenance will increase the allocations to BMAR, but we foresee no insurmountable problem in execution.

BMAR. The backlog of maintenance and repair has been discussed already. In fact, the Army funds many BMAR projects each year. The amount obligated on critical BMAR work in 1981 exceeded $288 million, but due to the fact that dollars were inadequate to support day-to-day needs for most of the year, the number of projects that were added exceeded those that were deleted. This chart shows the trends for the total Army and for Europe.



Real Property Maintenance Activities
O&MA Backlog of Maintenance
and Repair (BMAR)

¹FY 78 Is the Base for Congressional Containment Policy
²Includes Effects of Program Supplemental of $275.0 Million

The question you asked earlier, sir, I think the answer is in this chart. In Europe, the line currently is at $1.3 billion going down to $1.11 billion by the end of this fiscal year, going down to $1.01 billion by the end of 1983.

Senator HUMPHREY. So, the projected progress, 1982 to 1983, is about half what it was in the previous year?

General HILMES. Yes, sir.

Senator HUMPHREY. We reduced it by $200 million in 1981 and we are reducing it $100 million in 1982?

General HILMES. We are reducing by $160 million the previous year—by the end of fiscal 1982. That assumes the supplemental has been passed—the 1982 supplemental.

Senator HUMPHREY. Does your chart go out to the end of 1983 or beginning of 1983?

General HILMES. Out to the end of 1983, sir. Then with the budget request that we are making we would only reduce Europe by $100 million by the end of fiscal year 1983.

BEST DOCUMENT AVAILABLE

Senator HUMPHREY. Earlier you said the Army is on record as requiring some $300 million. Will you explain that to me again?

General HILMES. Yes, sir. We are on record as having an additional requirement for $300 million to apply against this backlog of maintenance.

Senator HUMPHREY. In Europe?

General HILMES. Approximately $150 million would be in Europe, almost half.

Senator HUMPHREY. The Army is on record. Did the Army ask for this much in its budget submission?

General HILMES. The Army asked for $2.4 billion, sir. In the scrub process that I mentioned going through OSD the full request did not carry over.

Senator HUMPHREY. In other words, the request from your command was $300 million more than you got? Is that what you are saying?

General HILMES. That is right.

Senator HUMPHREY. You may proceed.

General HILMES. I don't have to relate the part here on the living and working conditions in Europe, sir, because I know you are familiar with that.

There is a table in my prepared statement that stratifies the reported 1981 BMAR for the three major commands, FORSCOM, TRADOC, and USAREUR. All the others are aggregated. This is the same table as in our December 15 report.

In February 1981, the Comptroller General of the United States issued a report to the chairman, Committee on Appropriations, U.S. Senate, which criticized the services' BMAR reporting systems, but generally concluded that the backlog was probably understated.

On this point, the Army is already within the parameters of GAO recommendations in this report. Specifically, the Army reporting system does measure the total unconstrained backlog. The reported backlog is the base for forecasting BMAR in future years, with adjustments for all factors affecting BMAR growth. As a management indicator, the Army backlog estimates are considered to be reasonably accurate. Allowances are made for all BMAR growth factors in our estimating computations.

Senator HUMPHREY. Are you saying that the Army's backlog parameters are now satisfactory to GAO? Did they find you deficient in that regard?

General HILMES. They criticized us, sir. We have taken their comments under advisement and are making substantial progress. Our backlog, if anything, is understated, but reasonably accurate as a management indicator.

It makes no sense at the installation level for a facilities engineer to spend a large amount of money to identify all of his backlog. He identifies precisely the most important part and designs those projects and he keeps the rest in kind of a working file or perhaps on a gross estimate basis, but it is our contention until we get the backlog down there is no point in identifying all the details.

Senator HUMPHREY. I understand. I want to ask you another question.

I am going to have to recess here for 2 or 3 minutes.

[Recess.]

Senator **Humphrey**. I just want to explore for a moment the GAO criticism. They felt your backlogs were not being understated or overstated or what?

General **Hilmes**. As I remember the report, sir, it was just not accurate.

Senator **Humphrey**. They did not characterize it in either direction?

General **Hilmes**. I believe they concluded that, if anything, it was understated.

Senator **Humphrey**. Did they make recommendations to you on how to change your procedures?

General **Hilmes**. They made recommendations, sir, and they had some suggestion on procedures, yes, sir.

Senator **Humphrey**. But you have not embraced all of those, I take it?

General **Hilmes**. Typically we embraced all of those that made good business sense. We of course communicated with the investigators. We think that we are making good progress with the thrust of their report.

Senator **Humphrey**. How significantly understated are these figures? I can understand how you are doing it. There is no sense working up accurate figures on projects which cannot be afforded. I am not criticizing that, but I am trying to get an idea how characteristic these figures are.

If you were to have accurate figures on all of the backlog projects, by what percentage do you think that would increase the total backlog?

General **Hilmes**. Of course anything I give you at this point is a guess.

Senator **Humphrey**. I understand.

General **Hilmes**. But based on my experience—I have been in this business about 5 years at both the installation and MACOM's, specifically USAREUR, before I came to the job at the DA level—I would say no more than 20 percent.

Senator **Humphrey**. Will you continue, please.

General **Hilmes**. I was about to sum up.

The fiscal year 1983 budget estimate for Army real property maintenance activities was formulated with two major objectives in mind. These were: (1) to finance annual maintenance and repair requirements fully, and (2) to reduce BMAR in Europe and prevent real growth elsewhere. There is a need to maintain stability in this program as opposed to the uncertainty of past practices, that is, relying on migration of dollars from other accounts at year-end to offset funding shortfalls.

The Army is on record as having an urgent requirement for an additional $300 million from facilities maintenance in fiscal year 1983. This would enable us to reduce the projected backlog at the end of 1983 from $1,736 million to $1,436 million.

That would put us within 1 year of the congressional containment level of $1.24 billion.

Senator **Humphrey**. The containment level is what drives that $300 million figure?

General HILMES. No, sir, not really. We want to reach the containment level as quickly as possible. Our goal of course is to get down below that. The $300 million figure really represents continuing the momentum which has been set this fiscal year specifically if the $275 million supplemental gets approved.

Senator HUMPHREY. Continuing this year's momentum? Can you expand on that?

General HILMES. Yes, sir. Some of the problems that we have had with the facilities engineers at installations has been, as the GAO report points out, that they have not bothered to identify their total problem because the dollars have never been there. Now that dollars are flowing they are getting very serious about fixing some of their problems at their bases, particularly the large problem ones which they could not afford to address before.

So they have geared up for this. They have hired an A–E firm to supplement their design capability. They are putting more repair projects on the shelf, fully designed, ready to go. The system is really starting to work well now since there is some resourcing behind it.

Now if we make this a 1-year program it will fall right back off and we will be right back where we started 18 months ago.

Senator HUMPHREY. You characterize the need as urgent?

General HILMES. Yes, sir. If you look at those pictures and remember your experience in Europe, I think you will agree that we have an urgent requirement.

Senator HUMPHREY. Apparently somewhere upstream they don't agree with that. Do you have any idea why?

General HILMES. In very gross terms, sir, it is a guns or butter situation. We have a lot of new weapon systems coming into the Army and into the Department of Defense.

Senator HUMPHREY. You said that you have a lot of new weapons coming in. Are you saying that the O. & M. costs are increasing because of the introduction of new weapons or are you saying money is being spent on procurement? I realize both are happening, but what did you mean by that?

General HILMES. We have a lot of requirements that compete for our total obligational authority. So, we must make decisions as best we can as to balance between acquisition of new weapons systems and many other initiatives and what we spend on our facilities. In that process of course from our perspective we arrive at the budget that allows us to make progress really only in Europe.

Of the $300 million, approximately half of that would be spent in the United States and in the Pacific. The Army in Korea is in a similar situation, actually worse than Europe. It is a smaller problem in Korea.

Senator HUMPHREY. It is smaller, but more intense?

General HILMES. That is correct.

Senator HUMPHREY. I intend to pay a visit to Korea the next chance I get. That is my next destination. I will have a chance to look at the personnel.

General HILMES. A very interesting theater and very dynamic. They are still living in Quonsets. Our facility engineers in the United States and Korea especially will be hard pressed to prevent real growth if these additional dollars are not forthcoming.

We seek these resources because we are dedicated to the cause of improving the living and working conditions for American servicemen and servicewomen stationed at military installations and communities all around the globe. I don't want to focus only on the negative aspects of our facilities. We do have some facilities that are serving their occupants well—many are in satisfactory condition, thanks to the support of this committee.

The resources available in 1982 will produce a downturn in BMAR for the first time in a decade. There will be some substantial improvements in existing conditions, particularly in Europe. But we must not falter in our efforts to improve the quality of life for our soldiers everywhere and improve the readiness and sustainability of the force.

Our military facilities are an integral part of the total defense posture of the United States. Their condition tells a great deal to both allies and potential adversaries about our resolve to defend our country and its vital interests.

Accordingly, I ask you continued support for this program. In particular, the funding increases requested for facilities maintenance in both fiscal years 1982 and 1983 are necessary to make real and lasting progress toward improving Army facilities.

This completes my statement.

[The prepared statement of Brigadier General Hilmes follows:]

PREPARED STATEMENT BY BRIG. GEN. JEROME B. HILMES, DEPUTY DIRECTOR FOR FACILITIES ENGINEERING AND HOUSING, DIRECTORATE FOR MILITARY PROGRAMS, OFFICE OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY

INTRODUCTION

Mr. Chairman and Members of the SASC Preparedness Subcommittee. It is a distinct honor to appear before the Preparedness Subcommittee to discuss Army facilities. On December 15, 1981, the Chief of Engineers, US Army, submitted a report on real property maintenance to the full Committee on Armed Services in response to direction in Senate Report 97-58. I shall briefly review the substance of the Army's report as a point of departure for discussing facilities in general. I will explain the requirements determination process, integration of the real property maintenance submission with the MILCON budget, tracking execution of real property maintenance activities, and Backlog of Maintenance and Repair (BMAR) by major command or region.

ARMY REPORTS TO CONGRESS

In the Senate report, the committee expressed deep concern over the material readiness and morale implications which follow from prolonged inattention to the living and working conditions our soldiers now experience. You correctly perceived this problem in Europe as being at a critical stage for the U.S. Army. For years, the Army has been concerned also about the consequences of facilities deterioration, but constrained budgets and shrinking buying power continued to take their toll on real property maintenance programs. With improved funding levels in fiscal year 1982, we expect to reduce the backlog of maintenance and repair. This table shows a comparison of annual maintenance and repair requirements, backlogs of maintenance and repair, and fiscal year 1982 funding levels for the maintenance and repair of real property. The funding level includes a supplemental request of $275 million specifically for real property maintenace.

Comparison of M&R Requirements, Backlogs, and Funding
(Dollars in Millions)

MACOM	Annual Maintenance& Repair Requirements	Backlog of Maintenance & Repair[1]	FY 1982 Funding
FORSCOM	231.4	438.0	400.7
USAREUR	331.5	1,270.6	470.6
USAEIGHT	38.9	181.0	125.4
TRADOC	195.5	276.8	342.2
All Other	139.7	121.7	183.3
Total	937.0	2,288.1	1,522.2[2]

[1] Carryover from FY 1981 Based on Actual Reports from MACOMs
[2] Includes Program Supplemental of $275.0 Not Yet Approved by the Congress

What the table does not show is the growth in backlog that would occur in 1982 if funding exactly matched the annual maintenance and repair requirements. At 8 percent, inflation would add $175.4 million to the carryover 1981 backlog, deterioration would cause growth of $65.8 million, but currency exchange fluctuations in Europe will actually reduce the carryover backlog amount by $95.6 million. Backlog growth of $145.6 million would occur as a function of these growth factors in 1982 if no projects were added or deleted. In years past, the backlog has risen substantially year after year because there were no dollars to offset these growth factors and day to day needs were not being met. Thus, many new projects became backlogged work on top of the other growth—a snowball effect. Facilities engineers everywhere are encouraged that resources are beginning to flow in sufficient quantities to get at the job that really must be done.

As the Army reported to you in December, at least $432.6 million of the total funding for maintenance and repair of real property will be allocated to accomplish over 2,600 BMAR projects by four of the largest major commands. The other major commands are expected to spend another $25 to $30 million on BAMR work. If the supplemental budget request is appropriated, almost all of the additional $275 million for real property maintenance will be allocated to further reduce the backlog in the US and in Korea. Only $34 million would go to Europe in light of the substantial increase they have already been allocated in 1982 over 1981. These supplemental funds are essential to achieve substantive BAMR reductions in other geographic regions.

FACILITIES MAINTENANCE

Army RPMA activities.—RPMA budget estimates are formulated to support the activities of facilities engineers at military installations and activities around the world. The Army's facilities engineers operate and maintain facilities at 95 major installations in the United States, 787 installations in Europe, a Panama Defense Complex, and 152 installations in the Pacific. Each major installation is similar to a small city, i.e., consisting of buildings and other structures, utilities distribution systems, roads, airfields, drainage systems, plus military training areas and ranges not found in a civilian community.

The total replacement value of all Army facilities in 1981 was approximately $137 billion. In order to operate and maintain this very substantial amount of Army real property, the facilities engineers must spend at least $2.4 billion OMA funds in fiscal year 1983. At this level, operation of utilities, annual maintenance and repair requirements, some minor construction projects costing under $100,000 each, and other engineering support activities can be funded. The dollars being requested will enable the Army to actually accomplish some BMAR work in 1983, but mostly in

Europe. Other commands will be limited to financing their annual maintenance and repair requirements with limited funding capability to offset BMAR growth caused by inflation and deterioration, although real growth can be avoided in most cases. There will be visible improvements in both the living and working conditions for American soldiers, with the most positive results occurring in Europe. However, the improvements will be slight compared to the total BMAR problem, and it is essential that the momentum begun in 1982 be continued through 1983 and accelerated in future years. The final solution to the BMAR problem is still in the future, even after the significant progress expected in fiscal years 1982 and 1983.

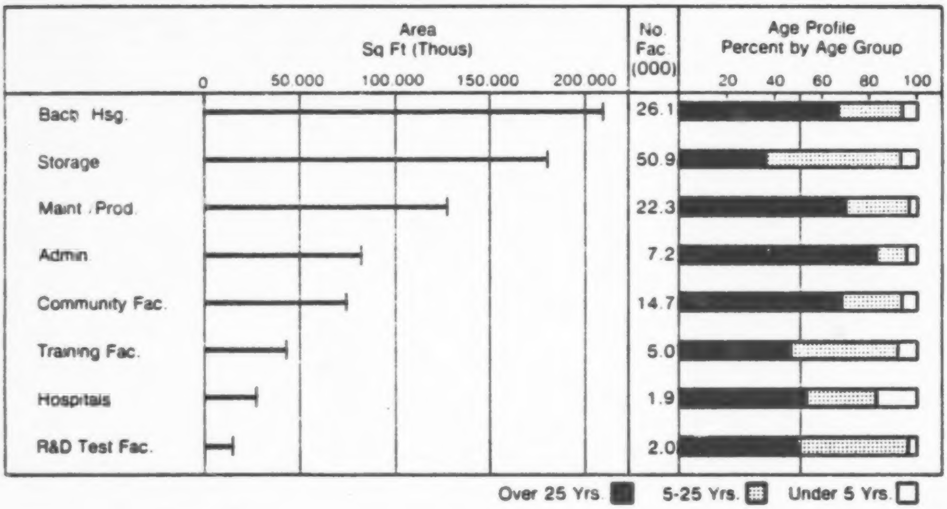
Facilities profile.—In order to provide this committee with an appreciation of the magnitude of the facilities maintenance workload, the following statistics are presented:

Real Property Maintenance Activities Statistics

1. Replacement Value of Real Property	137 Billion Dollars
2. Buildings (Over 200,000 Buildings)	1 Billion Sq. Ft.
3. Railroads	2,600 Miles
4. Surfaced Areas	534 Million Sq. Yds.
5. Acreage (Equal to Massachusetts, Connecticut and Rhode Island)	10 Million Acres
6. Electric Lines (6.8 Times Across the U.S.)	21 Thousand Miles
7. Water Lines (3.2 Times Across the U.S.)	10 Thousand Miles
8. Sewer Lines (2.5 Times Across the U.S.)	8 Thousand Miles

The Army maintains surfaced areas which, if combined, would form an area 2½ times larger than the District of Columbia. If you've driven on some of these streets lately and bounced over some of the potholes, perhaps you can understand our problem in keeping that much asphalt and concrete in good repair. The square footage of Army buildings being maintained are roughly equivalent in size to 153 Pentagons. Eighty percent of our building square footage, exclusive of family housing, is permanent construction. Three-fourths of the total is located within the United States. The following bar graph reflects the area and age profile of various categories of buildings.

Military Real Property Profile
Largest Categories of Bldgs. — Size and Age



The age profile reflects the fact that almost two-thirds of the buildings represented are over 25 years old—the median age of the existing plant is 35 years. Only 7 percent of the buildings were constructed in the past 5 years. Of course, we have modernized a number of the older facilities, particularly bachelor housing where during the past decade, 225,000 billet spaces or 25.2 percent of the total currently existing were rehabilitated at a cost of $1.5 billion. But one fact emerges here, the sheer size of the physical plant and the aging of facilities must drive upward the resources requirements for facilities maintenance.

Requirements determination process.—The requirements determination process is a matter of priorities being integrated into a systematic process for developing a detailed maintenance plan. The Army's report of last December identified real property maintenance priorities as being mission-essential projects, maintenance and repair of living and working areas, utilities systems, and work associated with the protection of our investment. Priorities are usually determined at the local installation or community level by urgency of need. The number of installations around the world were cited earlier to give an indication of the magnitude of the on-going activity. It is important to note that the installations vary from one another because of geographic location, size, troop population, mission, age profile of buildings, and spatial relationship with surrounding civilian communities. The local commander and facilities engineer must plan to meet the critical needs at that particular installation and decide how to provide adequate facilities to accomplish their mission. A plan is prepared based on annual and long-range requirements and is executed based on resource availability. This schematic reflects the process used by facilities engineers to estimate the total requirements for facilities maintenance.

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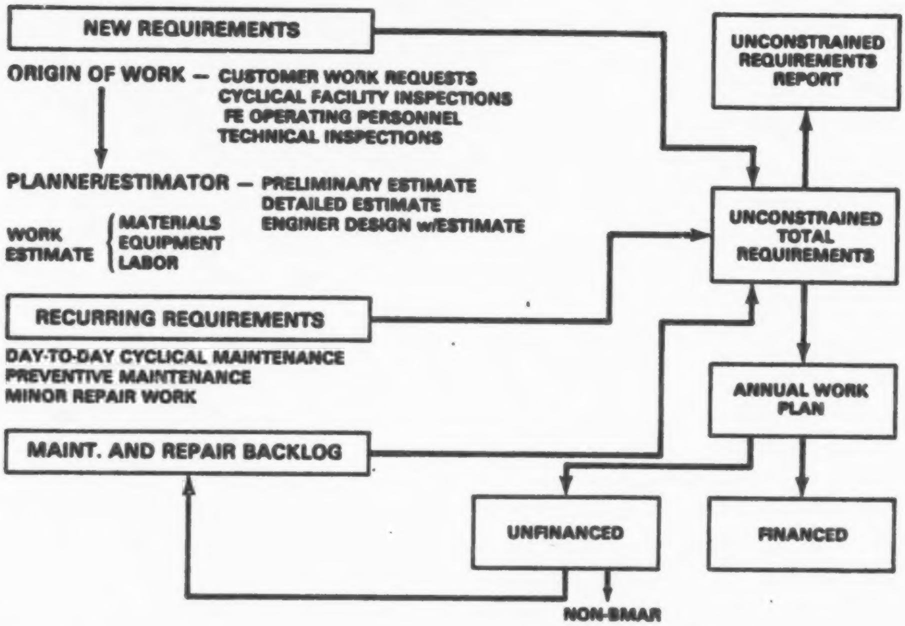
MAINTENANCE PLAN


NEW REQUIREMENTS
ORIGIN OF WORK — CUSTOMER WORK REQUESTS
CYCLICAL FACILITY INSPECTIONS
FE OPERATING PERSONNEL
TECHNICAL INSPECTIONS
PLANNER/ESTIMATOR — PRELIMINARY ESTIMATE
DETAILED ESTIMATE
ENGINER DESIGN w/ESTIMATE
WORK ESTIMATE
MATERIALS
EQUIPMENT
LABOR
RECURRING REQUIREMENTS
DAY-TO-DAY CYCLICAL MAINTENANCE
PREVENTIVE MAINTENANCE
MINOR REPAIR WORK
MAINT. AND REPAIR BACKLOG
UNCONSTRAINED REQUIREMENTS REPORT
UNCONSTRAINED TOTAL REQUIREMENTS
ANNUAL WORK PLAN
UNFINANCED
FINANCED
NON-BMAR

The total unconstrained requirement for facilities maintenance is the sum of three variables: (1) new requirements, (2) recurring requirements, and (3) carryover maintenance and repair backlog from prior fiscal years. The new requirements derive from demands made by occupants of the facilities and identification of necessary repairs by operating personnel during cyclical or technical inspections of facilities. Recurring requirements includes cyclical maintenance of buildings and roads and grounds, servicing utilities systems, and similar jobs. The carryover backlog is simply the BMAR carried forward from previous years.

Priority is being given to repairing and maintaining troop housing, utilities systems, maintenance facilities, and medical facilities. Resource availability is an important factor in the project selection process. In the past, many large and costly projects were not even considered because there were absolutely no prospects of getting sufficient funding to accomplish them. Now, the Department of the Army has urged the major commands to plan for accomplishment of some of the larger projects based on the increased funding levels in the current year and in the budget year.

This requirements determination process is a systematic, disciplined one. It is based on a careful analysis by the installation facilities engineer and his commander reinforced by guidance and assistance from higher headquarters, both major command and DA, as well as by staff visits and engineering inspections. The whole process is a complex interrelationship of many factors which varies among installations.

MCA integration.—To get the proper perspective on integration of the real property submission with MCA, it is important to understand that the final President's Budget request is the culmination of a rigorous planning, programming, and budgeting process spanning several budget cycles. As the Army guidance each year is reduced to financial programs, there is considerable competition among appropriations, issues, and programs for scarce resources. There is never enough total obligation authority available to do everything that everyone wants to do. A sort of natural selection process sifts out the weaker competitors and, after many scrubs of those issues being considered, the ones with strong and compelling justification of needs emerge as survivors. Within the Office of the Chief of Engineers, there are both automated and manual systems to force program balance. For example, each MCA project must be justified by means of a DA Form 1391. These are automated at departmental level and the data includes an estimate of the amount of BMAR that will be eliminated if the project is approved. The backlog estimates for several

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years have considered the effects of MCA offsets on projected carryover BMAR each year.

The rigorous process of prioritization is repeated partly at both the major command and installation levels. An installation commander or his facilities engineer would be aware if there were an MCA project already approved that would obviate the need for an OMA funded repair job. At all levels, the facilities engineers are sensitive to the integration of real property maintenance and MCA programs.

Tracking execution.—At departmental level, tracking the execution of real property maintenance activities is deliberately limited to macro-management techniques. It is impractical to micro-manage such diverse and widespread activities without unacceptable increases in staffing levels. The operating and maintenance accounts are continually changing as literally hundreds of decisions are made weeky at every installation and community concerning minor repair jobs, work orders, and small projects. But the macro-management being practiced this year is considerably more involved. In fact, intensified management initiatives for 1982 began 1½ years ago:

Management Initiatives

• Program-Budget Guidance, Oct 80	Project Selection Criteria Management Guidelines
• HQDA Letter 421-81-1, May 81	Reinforced PBG Stated Expectations for BMAR Reductions Discouraged Reprogramming
• Corps Letter to Divisions and Districts, June 81	Urged Support for FEs in OMA Execution
• Report to Congress (SASC), 15 Dec 81	MACOMs Defined Priorities, Plans, and Funding Allocations
• Quarterly Reports on Execution	Monitors Progress
• HQDA Staff Visits/Participation in In-Process Reviews (IPRs)	Participative Management

The last initiative is being continued indefinitely. Just last month, members of my staff attended an in-process review in Europe. This IPR as we call it, assessed the progress toward executing the 1982 program and also the 1983 program. A considerable amount of work has already been done in starting design work for 1983 maintenance and repair projects. I have recently reported to the Army Chief of Staff that almost $100 million of projects for 1982 are in process in the European Division and that $300 million of projects for 1983 have already been or soon will be assigned. These amounts are over and above the in-house design and contracting efforts of the major subordinate commands in Europe. This contrasts sharply with 1980 and 1981, when only $2 million and $10 million of OMA projects respectively were processed by the European Division. This represents a substantial augmentation of the facilities engineering workforce so they can get on with the tremendous job to be done over there. Of course, we maintain close ties with our counterparts at all major commands to include extensive dialogue on current operating problems.

We get a quarterly report from each major command on BMAR obligations by facility category. We also get a monthly summary of obligations by functional account by major command through the Army accounting system. This report contributes to the Army's effort to maintain an effective cost control system. It is useful in detecting aberrations that require some adjustment to funding authorization documents. There are other reports received periodically, e.g., the Command Operating Budget, the Prior Year Report, and the Unconstrained Requirements Report, which provide my staff with the necessary information to plan, program, and budget for RPMA worldwide. They assist in tracking execution also.

The following chart exemplifies the type of execution information we receive quarterly from the commands. The column on the right shows the obligations through the first quarter by facility category for four large major commands (USAREUR, FORSCOM, TRADOC, and USAEIGHT). This table is an extension of the data reported by the Army to the full committee on December 15, 1981.

FY 1982 Funding Allocations Against Current Backlog[1]

(Dollars in Millions)

Facility Category	Current Backlog	# Projects[2]	Allocations to BMAR Projects[3]	Obligations Thru 31 Dec 81
Operational Facilities	$ 55.6	53	$ 5.1	$ 1.3
Aviation Opn Facilities	39.0	20	4.9	2.6
Training Facilities	61.7	63	7.6	1.5
Maintenance Facilities	226.5	284	63.8	5.9
Unaccompanied Personnel Housing/Dining Facilities	472.0	491	106.7	28.5
Community Facilities	219.3	281	28.3	7.6
Supply/Storage Facilities	185.5	180	20.5	5.3
Hospital/Medical Facilities	57.2	110	22.0	1.7
Utility Systems	431.2	679	111.8	17.4
Administrative Facilities	141.2	202	27.2	8.1
Roads and Grounds	366.5	239	33.0	10.4
Other	32.4	10	1.7	1.4
Totals[3]	$2,288.1	2,612	$432.6	$91.7

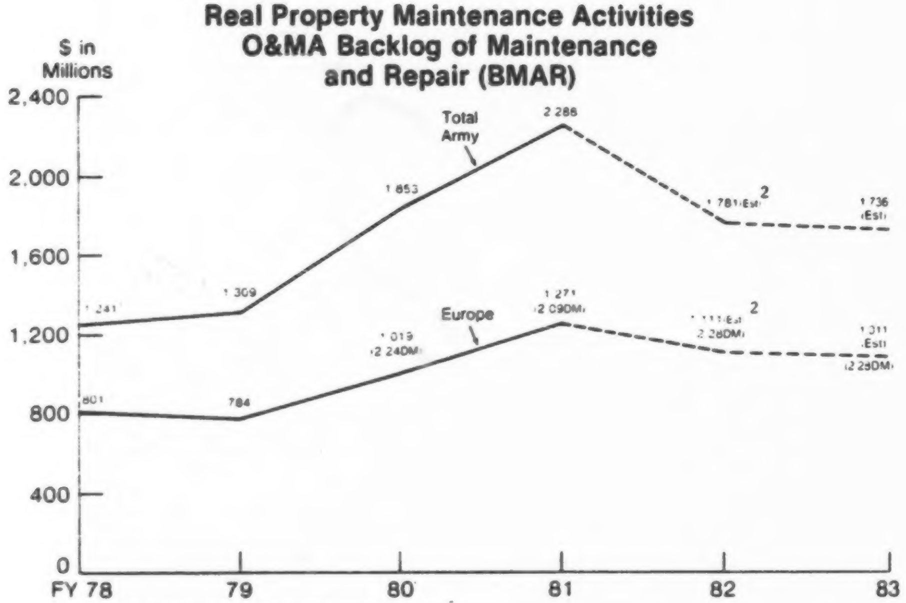
[1] Reported to the SASC, 15 December 1981

[2] Projects for Four MACOMs Only: USAREUR, FORSCOM, TRADOC, USAEIGHT

[3] Allocations Prior to Program Supplemental of $275.0

The rate of obligations against allocations to BMAR projects was slightly above 21 percent. This could have been greater except for fiscal restraints imposed during the first quarter while the Army was operating under Continuing Resolution Authority. Even, so, the first quarter performance was much improved over last fiscal year, when only $34 million was spent on BMAR projects in the first three months. The program supplemental of $275 million requested for facilities maintenance will increase the allocations to BMAR, but we foresee no insurmountable problems in execution.

BMAR.—The backlog of maintenance and repair has been discussed to some extent already. In fact, the Army funds many BMAR projects each year. The amount obligated on critical BMAR work in 1981 exceeded $288 million but, due to the fact that dollars were inadequate to support day-to-day needs for most of the year, the number of projects that were added exceeded those that were deleted. The trends for the total Army backlog in the Operation and Maintenance, Army appropriation over a period of 5 years are displayed below. Effects of the program supplemental request have been estimated in 1982.



Real Property Maintenance Activities
O&MA Backlog of Maintenance
and Repair (BMAR)

[1] FY 78 is the Base for Congressional Containment Policy

[2] Includes Effects of Program Supplemental of $275.0 Million

The severity of the problem in Europe in relation to the rest of the world is clearly illustrated in this diagram. The long-term neglect of facilities in Germany has resulted in severely deteriorated buildings with living and working conditions far below acceptable standards. At the end of fiscal year 1981, more than 55 percent of the total Army backlog was in Europe. Much of the remaining backlog is concentrated in Forces Command and the Training and Doctrine Command at military installations in the United States. The following table stratifies the reported 1981 BMAR for these three commands (FORSCOM, TRADOC, USAREUR) with all other aggregated.

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BMAR REPORTED BY MACOMs -- 30 SEPTEMBER 1981
(Dollars in Millions)

Facility Category	FORSCOM	USAREUR	TRADOC	OTHERS	TOTAL
Operational Facilities	4.4	43.4	1.9	5.9	55.6
Communication Facilities	0.6	5.2	0.9	2.2	8.9
Aviation Opn. Facilities	25.0	8.6	1.1	4.3	39.0
Waterfront & Harbor Facilities	0.2	0.5	4.8	0.6	6.1
Training Facilities	42.4	5.7	10.5	3.2	61.8
Maintenance Facilities	22.8	177.3	8.2	18.2	226.5
Production Facilities	0.9	0.2	0.5	1.0	2.6
RDTE Facilities	0	7.7	0.5	3.6	11.8
Supply/Storage Facilities	32.1	117.6	6.6	29.1	185.4
Hospital/Medical Facilities	7.1	41.3	4.9	3.9	57.2
Administrative Facilities	12.2	75.6	22.5	30.9	141.2
Unaccompanied Personnel Housing-Dining Facilities	65.5	264.8	95.0	47.8	473.1
Community Facilities	15.2	146.3	19.3	38.6	219.4
Utility Systems	97.7	197.4	65.5	70.6	431.2
Roads & Grounds	112.0	179.0	34.7	42.6	368.3
TOTAL	438.1	1270.6	276.9	302.5	2,288.1

Past difficulties experienced in containing BMAR growth have raised questions about the efficacy of our management efforts. In February 1981, the Comptroller General of the United States issued a report to the Chairman, Committee on Appropriations, United States Senate which criticized the services' BMAR reporting systems but generally concluded that the backlog was probably understated. On these points, the Army is already within the parameters of GAO recommendations in this report. Specifically, the Army reporting system does measure the total unconstrained backlog. The reported backlog is the base for forecasting BMAR in future years, with adjustments for all factors affecting BMAR growth. As a management indicator, the Army backlog estimates are considered to be reasonably accurate. Allowances are made for all BMAR growth factors in our estimating computations.

RPMA WRAPUP

The fiscal year 1983 budget estimate for Army real property maintenance activities was formulated with two major objectives in mind. These were: (1) to finance annual maintenance and repair requirements fully and (2) to reduce BMAR in Europe and prevent real growth elsewhere. There is a need to maintain stability in this program as opposed to the uncertainty of past practices, e.g., relying on migration of dollars from other accounts at year-end to offset funding shortfalls. The Army is on record as having an urgent requirement for an additional $300 million for facilities maintenance in fiscal year 1983. This would enable us to reduce the projected backlog at the end of 1983 from $1736 million to $1436 million. Half of that amount would be spent outside Europe in the United States and the Pacific where an infusion of dollars is essential to carry out a successful backlog reduction program. Our facilities engineers in the U.S. and Korea especially will be hard pressed to prevent real growth if these additional dollars are not forthcoming.

We seek these resources because we are dedicated to the cause of improving the living and working conditions for American servicemen and servicewomen stationed at military installations and communities all around the globe. I do not want to focus only on the negative aspects of our facilities. We do have some facilities that are serving their occupants well—many are in satisfactory condition. The resources available in 1982 will produce a downturn in BMAR for the first time in a decade. There will be some substantial improvements in existing conditions, particularly in Europe. But we must not falter in our efforts to improve the quality of life for our soldiers everywhere and improve the readiness and sustainability of the force. Our military facilities are an integral part of the total defense posture of the United States. Their condition tells a great deal to both allies and potential adversaries about our resolve to defend our country and its vital interests. Accordingly, I ask your continued support for this program. In particular, the funding increases re-

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quested for facilities maintenance in both fiscal years 1982 and 1983 are necessary to make real and lasting progress toward improving Army facilities.

Senator HUMPHREY. General Hilmes, thank you. Your statement that our engineers in the United States and Korea will be hard pressed to prevent real growth if these additional dollars are not forthcoming, by additional do you mean what is in the 1983 budget or what you are requesting?

General HILMES. By additional, sir, I was referring to the $275 million supplemental requested along with the 1983 budget request and of course implicitly to our stated requirement for additional dollars that could be effectively spent.

Senator HUMPHREY. Were there any dollars reprogramed out of property maintenance for other purposes?

General HILMES. No, sir.

Senator HUMPHREY. In 1981?

General HILMES. No, sir. We have not experienced any reprograming of dollars. By the end of the fiscal year the commands have met the real property that we set and typically obligated more money than provided in the RPMA account.

Senator HUMPHREY. By the end of 1982?

General HILMES. The same thing I would expect, sir.

Senator HUMPHREY. We will have some questions for you that we will submit in writing.

Let us go to General Welch. Will you give us your statement, General Welch?

STATEMENT OF MAJ. GEN. JAMES S. WELCH, DIRECTOR OF SUPPLY, MAINTENANCE, AND TRANSPORTATION, HEADQUARTERS, U.S. ARMY, MATERIEL DEVELOPMENT AND READINESS COMMAND, DEPARTMENT OF THE ARMY, ACCOMPANIED BY MAJ. GEN. VINCENT M. RUSSO, DIRECTOR OF SUPPLY AND MAINTENANCE, OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS; BRIG. GEN. ROGER J. PRICE, DIRECTOR OF OPERATION AND MAINTENANCE APPROPRIATION, OFFICE OF THE COMPTROLLER OF THE ARMY; AND BRIG. GEN. EDWARD HONOR, DIRECTOR OF RESOURCES AND MANAGEMENT, OFFICE OF THE DEPUTY CHIEF OF STAFF FOR LOGISTICS

General WELCH. Mr. Chairman, it is a pleasure to appear before the committee today because I appreciate the opportunity to discuss with you the Army's Depot Materiel Maintenance and Support Activities program.

With me today are Maj. Gen. Vincent M. Russo, Director of Supply and Maintenance, Office of the Deputy Chief of Staff for Logistics; Brig. Gen. Roger J. Price, Director of Operation and Maintenance Appropriation, Office of the Comptroller of the Army, and Brig. Gen. Edward Honor, Director of Resources and Management, Office of the Deputy Chief of Staff for Logistics.

My statement will provide you with an overview of our entire maintenance program as well as highlight some of the improvements and innovations in the program.

In my view, Depot Materiel Maintenance and Support Activities is as integral a part of Active and Reserve component readiness as the operational training conducted by field units. Its contribution to readiness is accomplished in two separate, yet closely interrelated ways.

The first element is the hardware program which, except for new procurement, is the only source of equipment supply for combat units. Our Army depots and commercial facilities provide the capability for overhaul, conversion, or repair of major and secondary items of equipment and the expeditious return of these items to user units. It is not only an efficient source of supply but also a cost-effective one. Return of equipment to serviceable condition costs on average only about 25 percent of new procurement. For some systems or equipments out of production, maintenance is the only source of supply. Thus, a depot capability, fully equipped, manned to meet the workload and appropriately funded, is a significant and positive step towards achieving our military preparedness goals.

The second element of the depot maintenance program—maintenance support activities—is not as glamorous as the hardware program, but is every bit as critical in achieving and sustaining field readiness. Maintenance Support Activities focus primarily on support to the field rather than support of the overhaul lines. It funds the fielding of new systems and equipment; maintenance engineering support before, during and after deployment; new equipment training; and, the update of publications and technical manuals for operation and maintenance of equipment after fielding.

Through the fiscal year 1981 supplemental appropriation and the fiscal year 1982 budget amendment, we have made great progress to achieve the Army objective of a zero executable hardware backlog by September 30, 1982. We believe that given continued congressional support, we can continue that posture through fiscal year 1983. The unfinanced part in Maintenance Support Activities, however, causes me great concern about our ability to deliver the necessary engineering, training, and technical support needed to meet both our new system deployments and, simultaneously, support all of our older fielded equipment.

DEPOT MATERIEL MAINTENANCE

Now I would like to describe the depot maintenance process.

The acronym PRIDE, Productivity Improvement Decade Eighty, is our theme for this decade. I will discuss later certain of our initiatives in this area.

When you look at the total fiscal year 1983 OMA appropriation request before Congress, you see that for fiscal year 1983 P7M or the total depot maintenance program is at $1.7 billion or 10 percent of the total OMA. The hardware portion of the program is $1.2 billion. We estimate contract maintenance for fiscal 1983 at 30 percent of the total.

The Army's Depot System is comprised of 17 widely dispersed Conus installations and the two overseas plants, Mainz and Ober-Ramstadt in Germany. The Conus depot work force of 39,000 employees is approximately one-third of total Darcom employment. Within the depot system the breakdown of employment is about 46 percent in maintenance with the balance split between supply operations and base operations support. In Conus our maintenance work is done at nine different depots on the basis of prime depot assignments.

At Anniston we perform maintenance on heavy combat vehicles such as the M60 series tank. We are currently repairing components for the M1 Abrams tank and will phase in the end items in fiscal year 1985. Other Anniston workload include various antitank and surface-to-surface missiles such as TOW, TOW-Cobra, Dragon, Lance, and small arms such as the M16A1 rifle.

Corpus Christi Army Depot is prime for helicopter airframes, engines, and transmissions. Examples of current workload are the UH-1 and AH-1 Cobra. Future missions will include the UH60A Blackhawk.

Letterkenny is our center for air defense missiles such as the Improved Hawk, self-propelled and towed artillery and fire control equipment not associated with specific end items.

Light combat vehicles are the mission of Red River. This includes the entire M113 family of vehicles as well as selected air defense missiles associated with armored personnel carriers. Road-wheels and tracks, for both tank and APC, are also done there.

Sacramento Army Depot is our depot for strategic communication and electronics equipment. This depot also supports signal intelligence/electronic warfare systems such as Quicklook and Guardrail and repair of night vision devices and laser range finders found on the M60 and M1 tanks.

Tobyhanna Army Depot is our prime for tactical electronics and strategic fixed/transportable systems such as Air Traffic Approach Radar and Battle Area Surveillance Systems. Tobyhanna also supports the worldwide Automated Digital Communications System (AUTODIN), the TACFIRE Direction System, and is responsible for communication and electronics equipment for special Electronics Mission Aircraft (SEMA).

Tooele Army Depot in Utah repairs trucks; overhauls truck components such as engines and transmissions; general equipment to include generators, rail, materiels handling equipment, and, construction equipment; and fabricates automotive rubber products.

Two other missions not shown include Communications Security Equipment [COMSEC] maintained at Lexington, Ky.; and Pershing surface-to-surface missiles at Pueblo, Colo.

Our overseas facility at Mainz, Germany, performs much the same combat vehicle maintenance for the European theater as is done at Anniston, Letterkenny, and Red River. It constitutes our forward deployed facility for the in-theater overhaul or repair of both heavy and light combat vehicles and associated secondary items. The Ober-Ramstadt Depot activity is the source for rubber products ranging form road-wheels and track to recapped pneumatic tires.

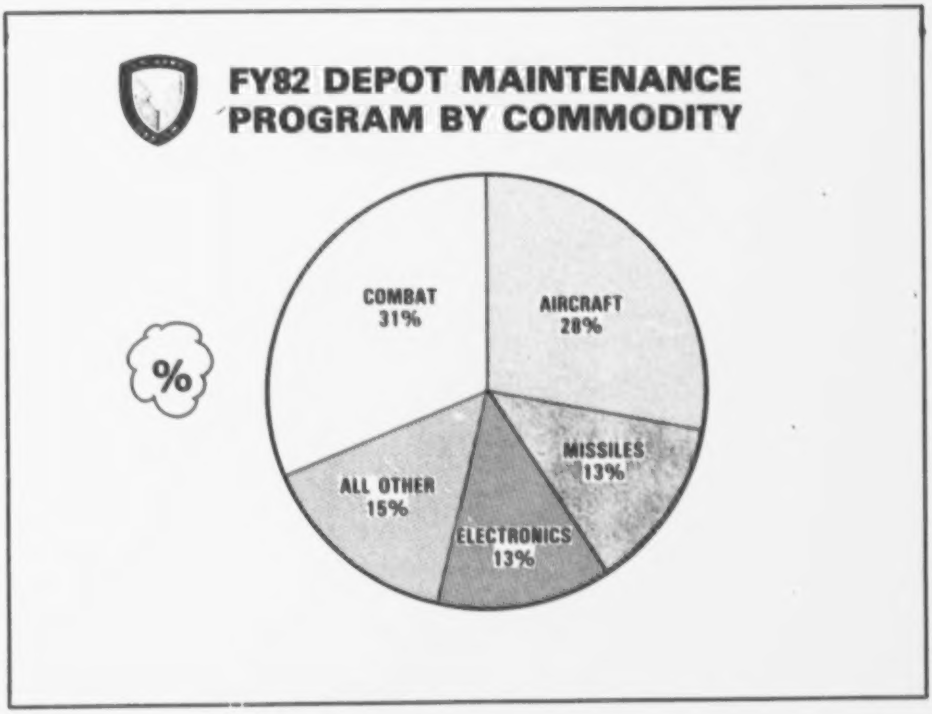
Supply issues to maintenance both the unserviceable materiel and the repair parts needed to do the work. The work is done in the maintenance shops and the equipment then returned to storage. That receipt of repaired materiel is then reported back to the national inventory control.

Please note for every eight maintenance personnel we estimate that one additional supply person is needed for supply support of maintenance. Maintaining the balance is essential, but because of the arbitrary reductions we face periodically we have difficulty sustaining the proper balance at times.

MAINTENANCE REQUIREMENTS

Now for maintenance requirements and how we get there. Starting with the authorized acquisition objective the supply manager will run through a requirement generation which considers the initial issue quantities required for the item, maintenance float requirements, operational project stocks, if there are to be any, as well as any special contingency stock requirement such as for the Rapid Deployment Force.

He or she then looks at what they have on hand in the way of both serviceable and unserviceable materiel. They project what their anticipated losses or "washouts" will be which then creates what is the ideal in terms of new procurement. Concurrent with that the supply manager develops the optimum overhaul requirement.



Looking at the fiscal year 1982 program, you see the distribution of the depot program by commodity. For your information, sir, the fiscal year 1983 program will be roughly the same. There is a 1-percent change between combat and aircraft and there is a 1-percent change in the total of missiles and electronics.

MANPOWER AVAILABILITY

A few words about manpower availability. Manpower availability is critical to effective and efficient operation of any industrial ac-

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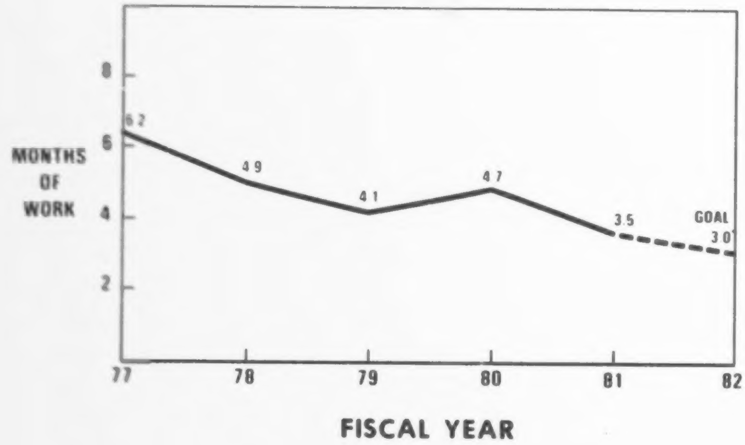
tivity. In late fiscal year 1980 and early 1981, depots were under a hiring limitation which left us some 1,501 personnel under authorization on February 28, 1981. Shortly thereafter our authorizations were increased by some, 1,500 spaces to reduce backlog and carryover.

We have achieved work force stability in fiscal year 1982 and the projection for fiscal year 1983 is promising. It defies common sense, however, to be expected to manage an industrial operation efficiently in a "feast or famine" manpower environment.



TREND FOR ORGANIC DEPOT MAINTENANCE CARRYOVER

Now for a few words about Depot Maintenance Carryover. This chart, shows the trend in months of funded work at fiscal year-end since fiscal year 1977 with our projection for September 30, 1982.

Please note that carryover applies only to financed work. Also note that we manage the work here in terms of a 15-month year. Three months of work on the books at fiscal year end enables us to maintain smooth production schedules and provides for continuity of operations. Thus in fiscal year 1981, through resumption of hiring, overtime and increased productivity, we have reduced the carryover from 4.7 to 3.5 months. As you can see, we expect to get 3 months carryover which we consider the ideal at the end of this fiscal year.

Now for a few words about productivity and management improvements. The maintenance rationalization study of 1977 gave us a productivity gain of 6 percent in both fiscal year 1978 and fiscal year 1979. That study is in combination with our going to the area-oriented depot concept.

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Second, standardization of overhead across the depots generated some 350 spaces for reinvestment. Through standardization of handtool cribs and self-service supply centers we save an additional 50 man-hours of effort. Greater emphasis on high sick leave and leave without pay rates have given us, we calculate, an additional 90 work years of productivity effort annually.

In structuring for productivity management, we created depot resource; management boards coordinate all productivity actions within the depots. An idea interchange program provides for exchange of new ideas and concepts between depots.

In the data processing area we have decentralized ADP terminal operations to the functional areas. We have converted data input to key-to-disk-to-magnetic tape. We have also eliminated 10 percent of our reports and reduced the number of copies an additional 10 percent. These efforts along with greater use of microform reports, have given us significant paper savings.

At the depots we have used management by objectives organizational results to refocus the people totally on performance results.

Further, all depot productivity enhancement has been brought together under an umbrella program we call DESPIP or the DESCOM productivity improvement program and integrated in the DARCOM RESHAPE effort, which stands for resources self-help affordability planning effort.

Through the use of organizational streamlining, capital investment, and other RESHAPE initiatives we gained 735 work years in fiscal year 1981.

Also we now have in the depots some 150 participative work improvement circles patterned after the Japanese quality circles.

Finally, where work processes and productivity are concerned, we have done what we call the Mainz-CONUS depot compatibility study. Its objective was to reduce the worktime required to bring unserviceable equipment to an acceptable use condition.

Moreover, we are now down the road with RCM, or reliability centered maintenance programs. RCM is a multifaceted program designed to establish the least maintenance cost for an item while meeting reliability and safety requirements. It has involved review of several programs. First, preventative maintenance checks and services have been reviewed to eliminate or reduce the frequency of organizational tasks to be performed.

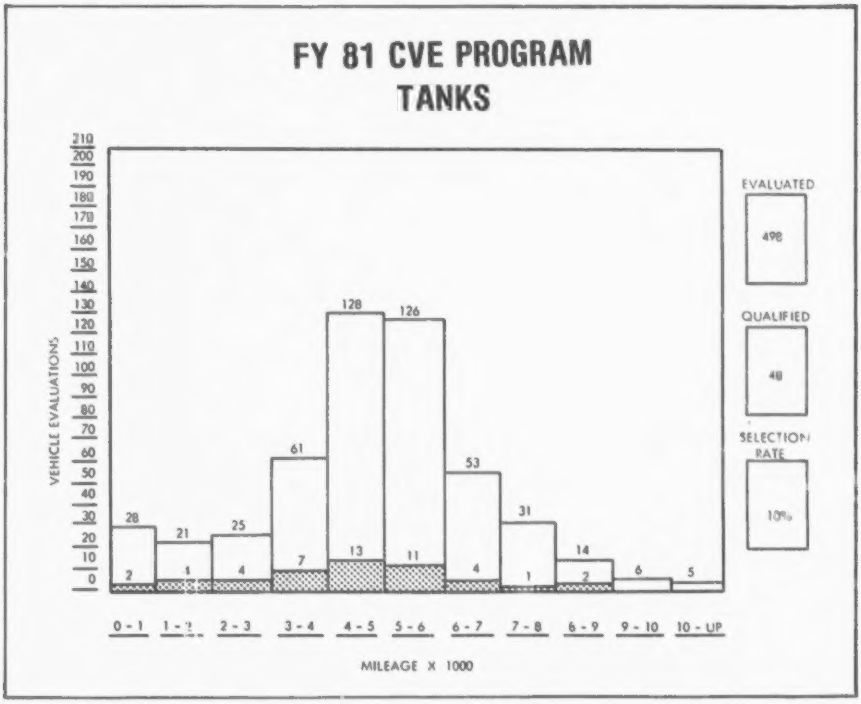
Second, on condition maintenance for aircraft to identify those that need overhaul based on actual condition as opposed to the number of flying hours accumulated since the last overhaul. Thus, in fiscal year 1981 we overhauled approximately one-half the number of aircraft that we would have overhauled under the 1974 criteria. Similarly, field teams and a telephone hotline in fiscal year 1981 returned to service some 614 engines that might have been unnecessarily returned to depots.

The DMWR or depot maintenance work requirements scrub is directed at eliminating "gold plating." For example, on a sample of 10 M-110 self-propelled howitzers, we found that system power trains, 6 engines, and 7 generators did not require overhaul and were reused as is. Through sample data collection we have validated the howitzer operational reliability while enjoying savings of $20,000 per vehicle.

The Army oil analysis program is part of a DOD-wide effort to detect impending component failures. Early identification of any unusual condition results in corrective maintenance prior to component failures.

COMBAT VEHICLE EVALUATION

Finally, the combat vehicle evaluation program is one whereby teams visit each CONUS and overseas location annually to ascertain, based on condition, which vehicles need overhaul. I would like to show you one example involving the M-60 tank.



Here you see that of the 498 tanks evaluated, only 48 or 10 percent qualified for overhaul. Under the old 5,000 to 6,000 miles criteria, 203 tanks would have been overhauled.

I might note, sir, that the 10 tanks that were under 3,000 miles were special cases such as a vehicle suffering crash damage during a training exercise as in one instance, a fire in the turret.

FORCE MODERNIZATION

Now for a few words about force modernization. We are deeply involved in the depots in the modernization of existing weapon systems through product improvements designed to enhance the overhaul capability of equipment and extend its useful life. A number of major fielded systems are involved. In addition we are preparing for depot support of major systems being or soon to be fielded.

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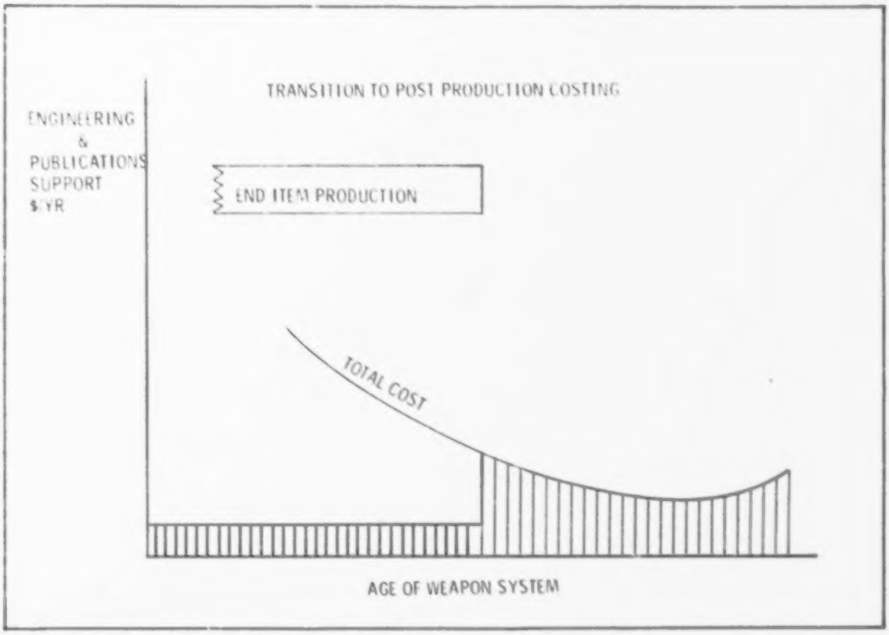
MAINTENANCE SUPPORT ACTIVITIES

Finally, I would like to address Maintenance Support Activities which focus primarily on support to the field forces. The program is critical to the fielding of new systems and equipment; the source of engineering support before, during, and after deployment; pays for new equipment training for units receiving equipment; pays for update of publications, technical manuals; and provides for technical assistance to support equipment after fielding. The program drivers are weapon systems deployments; older systems still in the field; system complexity; and new requirements.



As this national slide depicts, when end item production ceases the burden of engineering and publication support shifts totally to our Maintenance Support Activity. The longer a system remains active, the greater the added cost. In some instances, we can no longer procure repair parts with the original drawings. OMA funds must be expended then to update the technical data package.

Total requirements for maintenance support stated in then year dollars, have increased from $569 million in fiscal year 1980 to $729 million in fiscal year 1983. Although funding has increased from $299 million to $476 million, there has not been substantial program growth in any year as the additional funding has been mostly offset by inflationary increases.

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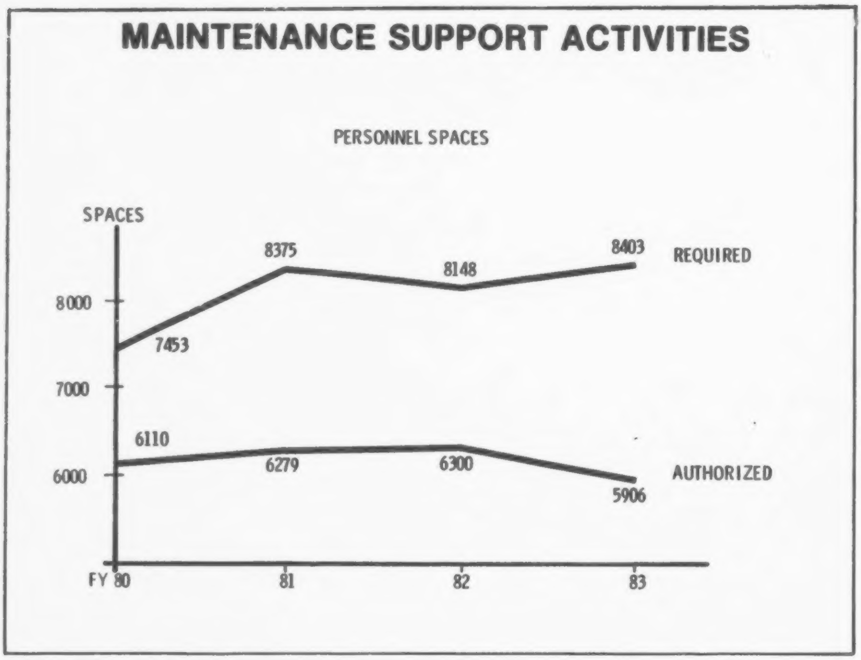
MAINTENANCE SUPPORT ACTIVITIES

This chart is how we see the manpower requirement in Maintenance Support Activities. The budget request is for a level of 400 below that of fiscal year 1982.

Since fiscal year 1979, the number of major end items being managed by the Army, for which maintenance engineering, technical assistance and publications support is required, has risen from 7,264, to 8,249. This increase of approximately 14 percent has occurred during the period when the in-house manpower necessary to provide maintenance support or manage contractor assistance has declined. As you know, sir, force modernization does not replace systems on a one-for-one basis.

Resource shortfalls in maintenance support will be manifested in many ways. The bottom line, though, is decreased readiness.

Sir, I thank you for the opportunity to appear here today. I will be pleased to answer any questions that you may have.

Senator HUMPHREY. Thank you, General. Let me first congratulate you on your successful management initiatives.

Going back to the beginning of your statement, you said that "Through the 1981 supplemental and 1982 budget amendment we have made great progress to achieve the Army objective of zero executable hardware backlog by the end of this year."

What do you mean by "great progress"? Do you have a chart on that?

General WELCH. Yes, sir. This carryover chart is the one where at the end of 1980 we are sitting there with 4.7 man-months. That is funded work, sir. We brought that down to 3.5 man-months in 1981 through additional personnel received in the fiscal year 1981 supplemental on overtime.

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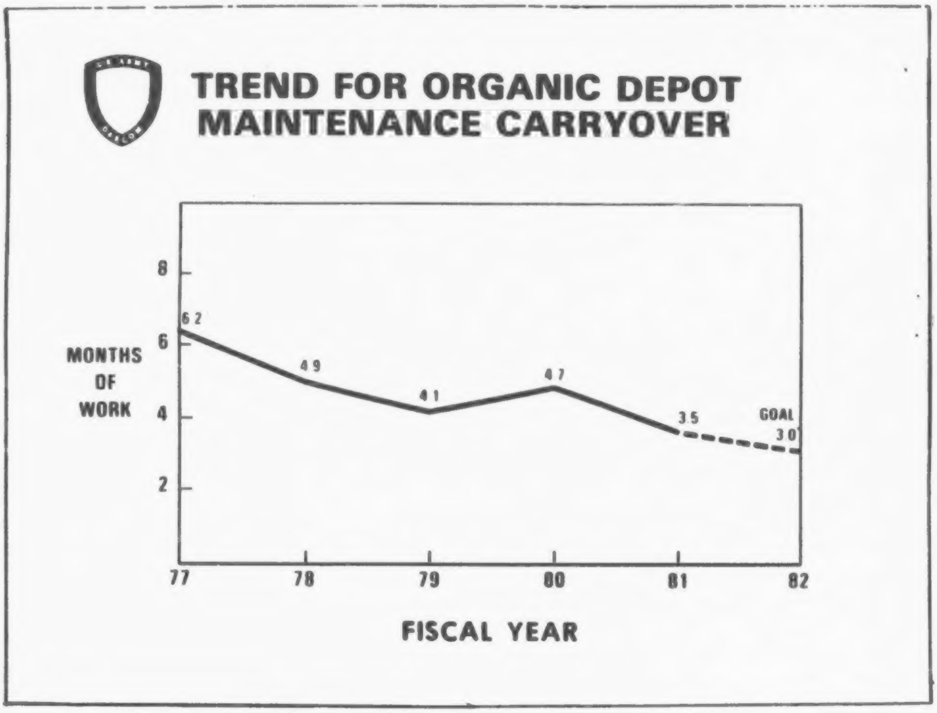
A target we expect to reach at the end of this year is the three man-months. With the additional funds received in the fiscal year 1981 supplemental and fiscal year 1982 amendment. It is planned to have zero unfinanced backlog at end of fiscal year 1982.



Senator HUMPHREY. Yes, I recall that. Thank you.

What about the manpower problem? How is that shaping up for 1983?

General WELCH. On the manpower situation, sir, in the "hard iron" program we are in very good shape. Our projection for 1983 is that it will continue at the level of 1982.

In the Maintenance Support Activities as I indicated the manpower is projected to be down 394 spaces vis-a-vis 1982.

Senator HUMPHREY. OK. We will get to that in a little while. Let me get back to the hardware.

You say the 1983 personnel levels will be OK?

General WELCH. Yes, sir.

Senator HUMPHREY. You are not going to be constrained by any ceilings?

General WELCH. No, sir.

Senator HUMPHREY. What is the upper solid line on your chart?

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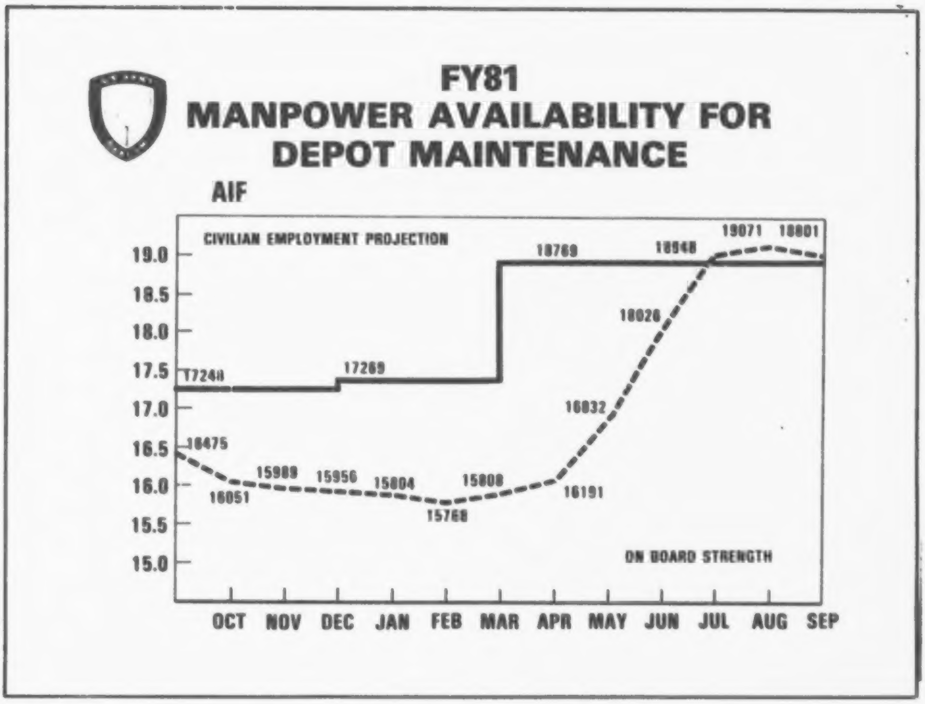

General WELCH. The dotted line is the actual on board strength. As you can see we were down quite a bit there caused by a hiring limitation and we started the upswing in the March-April time frame. Where we went over the line is when we brought temporaries on board in anticipation of retirement and so forth. We are now coming back down to the end strength.

Senator HUMPHREY. The solid line is your requirement?

General WELCH. The solid line is the civilian employment projection, CEP, the authorization.

Senator HUMPHREY. Is that the same as what you require?

General WELCH. In the case of fiscal year 1982, yes, sir.

Senator HUMPHREY. Now support activities. Will you expand on your problems here in the area of personnel?

General WELCH. Yes, sir. Taking fiscal year 1982, for example, we show a requirement of 8,148 with 6,300 authorized. Looking at fiscal year 1983 we project our requirement at 8,403. The authorization is projected at 5,906. This is roughly a 400 reduction from 1982. This is what I referred to in my remarks.

Senator HUMPHREY. Why has this historically been authorized at levels so far below requirements?

General WELCH. It is because, sir, primarily this program is not recognized as glamorous as the hardware program. People put the focus on hardware. With the new fieldings, particularly of equipment, the M1 tank which comes in, in addition, the M2 and M3, the fighting vehicle systems which come in, in addition to our 113 armored personnel carrier, not much going out.

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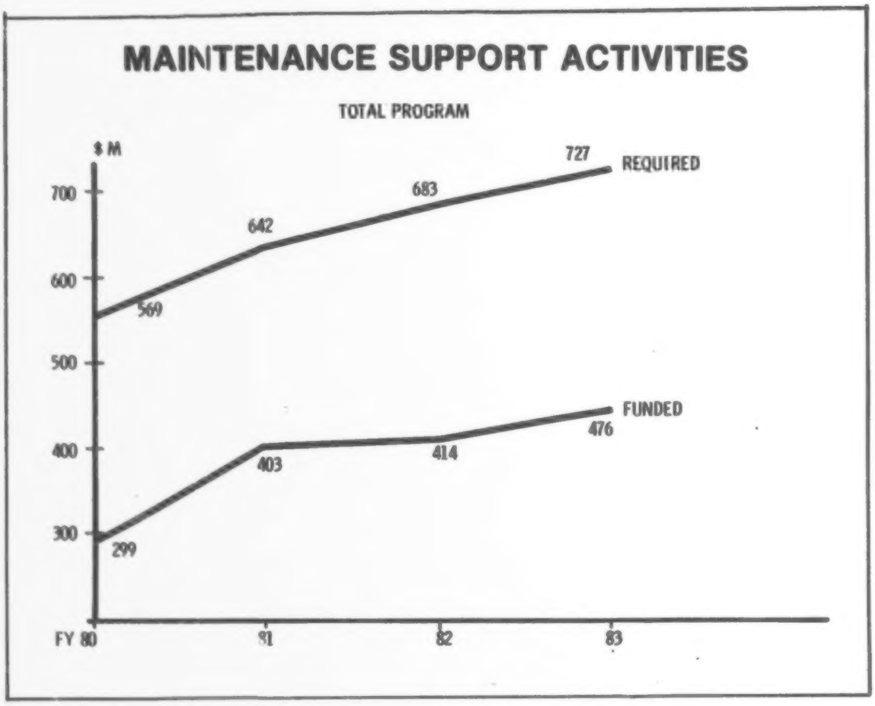

Senator HUMPHREY. Will you put up chart 30, please. The chart preceding this one. This is in dollars?

General WELCH. Yes, sir.

Senator HUMPHREY. Going back to the other chart—you need not put it up—but are you constrained there by some absolute number of personnel? Is there a cap or is there a dollar constraint on how many you can hire?

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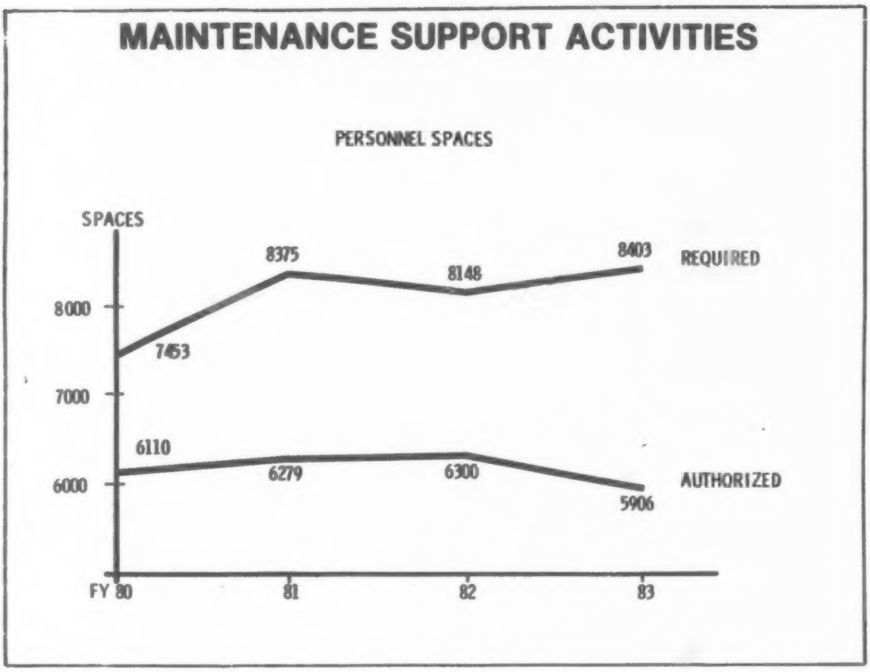

General **Welch**. We are constrained in terms of a manpower ceiling.

Senator **Humphrey**. There is an absolute ceiling in number of bodies that you can have?

General **Welch**. Yes, sir. In the case of fiscal year 1982 it is 6,300.

Senator **Humphrey**. Right.

General **Welch**. Here it shows the dollars going up slightly in 1983, but my manpower authorization is such that it comes off almost 400.

Senator **Humphrey**. What do you spend your money on in this area?

General **Welch**. Sir, we spend our money in this area on new equipment training, maintenance engineering support of the equipment, update of the technical publications, and technical assistance. The benefits of these programs range from the organization through our direct and general support, and finally to depot maintenance, through our depot maintenance work requirements (DMWR) documents for depot maintenance.

Senator **Humphrey**. You state that "Resource shortfalls in maintenance support will be manifested in many ways. The bottom line, though, is decreased readiness."

In what ways will decreased readiness manifest itself because of the constraints here?

General **Welch**. What it means, sir, is that you will not do as much training as you should. It means that you will continue using outdated publications in the field and because they are outdated people in organizations who are performing maintenance tasks may do the wrong thing or may not do the right thing.

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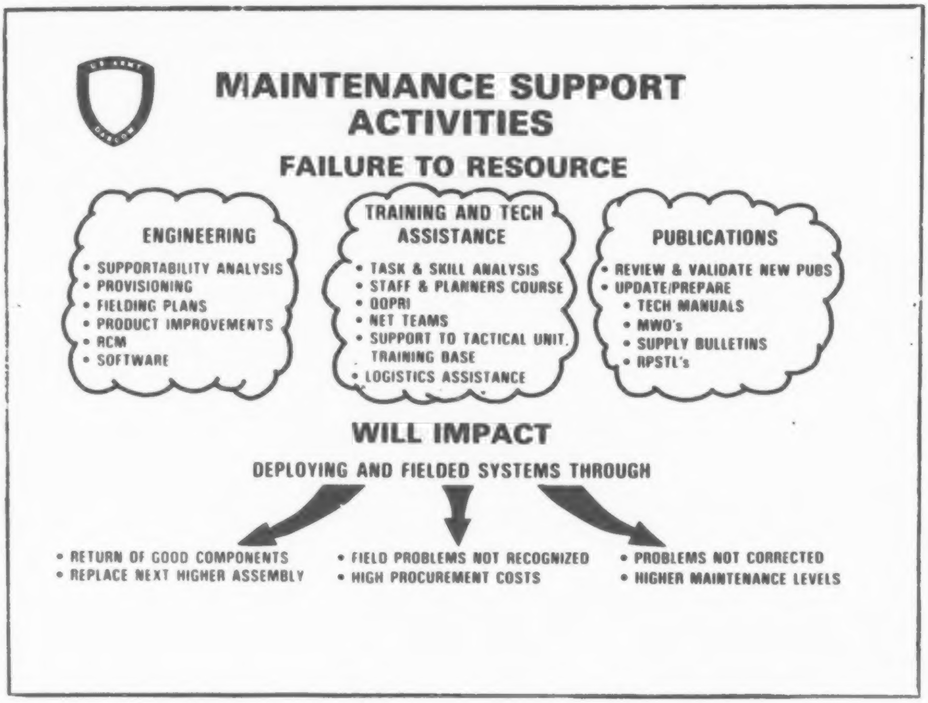
We have in here also some product improvements in the aircraft area which are not funded for design because of the lack of funds, this type of thing.

The next chart, sir, has sort of summarized it.



MAINTENANCE SUPPORT ACTIVITIES

FAILURE TO RESOURCE

ENGINEERING

- SUPPORTABILITY ANALYSIS
- PROVISIONING
- FIELDING PLANS
- PRODUCT IMPROVEMENTS
- RCM
- SOFTWARE

TRAINING AND TECH ASSISTANCE

- TASK & SKILL ANALYSIS
- STAFF & PLANNERS COURSE
- OOPRI
- NET TEAMS
- SUPPORT TO TACTICAL UNIT. TRAINING BASE
- LOGISTICS ASSISTANCE

PUBLICATIONS

- REVIEW & VALIDATE NEW PUBS
- UPDATE/PREPARE
  - TECH MANUALS
  - MWO's
  - SUPPLY BULLETINS
  - RPSTL's

WILL IMPACT

DEPLOYING AND FIELDED SYSTEMS THROUGH

- RETURN OF GOOD COMPONENTS
- REPLACE NEXT HIGHER ASSEMBLY

- FIELD PROBLEMS NOT RECOGNIZED
- HIGH PROCUREMENT COSTS

- PROBLEMS NOT CORRECTED
- HIGHER MAINTENANCE LEVELS

If you would like in terms of specifics I will be glad to work up some specifics for introduction into the record.

Senator HUMPHREY. I think that is satisfactory unless you wish to for some reason.

General WELCH. We welcome the opportunity, sir.

Senator HUMPHREY. All right.

[The information follows:]

The fiscal year 1983 funding of $476 million for Maintenance Support Activities leaves unfinanced requirements in the amount of $251 million. These funds are primarily in three principal functional areas: maintenance engineering, training, and publications.

Execution of planned programs and projects for maintenance engineering, technical assistance, and technical publications where contractual effort cannot be utilized will be jeopardized if our first priority to restore the 394 personnel spaces is not recognized.

Our highest priority requirement for funding is $62 million to accomplish urgent programs through contractual effort.

Of this amount, $23 million would be used in the engineering area to effect economies in maintenance operations, parts usage, and equipment stockage for several types of equipment, such as the M60 series tank and the M113 Family of Vehicles. Not funding this requiement will preclude performance of these maintenance engineering tasks and resolution of field deficiencies. An additional $5 million of the total amount would result in the completion of product improvement proposals for engineering changes necessary for the UH-1, RV-1, and EH-1 aircraft. Without this funding, maintenance costs in parts usage and manhour consumption will increase and safety of flight enhancements will have to be deferred.

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The balance of the $62 million would be used to: update technical publicatins, a $23 million requirement, without which delays in parts requisitioning will occur thereby impeding the repair of equipment in the field; $8 million for New Equipment Technical Training and depot training necessary for the initial transfer of knowledge and to insure our industrial base is skilled in the latest state-of-the-art maintenance techniques; and $3 million for printing of the revised publications which will expedite the distribution of correct information to the field.

Given the restoration of the 394 personnel and the financing of $62 million critical requirements, as previously mentioned, an additional $25 million and 545 personnel would further reduce the unfinanced requirements, primarily in the areas of publications and maintenance engineering. This would leave an unfinanced requirement of $164 million for lesser priority programs in the same functional areas.

Senator Humphrey. The Army has a program to track force modernization requirements. Is that integrated with the maintenance support?

General Welch. Yes, sir. The force modernization and integrated logistics support also comes under my staff supervision.

Senator Humphrey. How would you sum up in your area the O. & M. picture projected into 1983 versus what you expect by the end of 1982? How would you characterize it?

General Welch. In the hard iron program, sir, we are in good shape in terms of the manpower authorization and the dollars.

In the maintenance support activities we are not in as good a shape with the cut of 400 people.

What I would like is those back plus the dollars to go with them.

Senator Humphrey. I believe we will submit the rest of these questions in writing.

The record will remain open for 15 days for submission of requested material.

[Questions with answers supplied follow:]

Questions Submitted by Senator Gordon J. Humphrey

REAL PROPERTY MAINTENANCE OBJECTIVES

Senator Humphrey. What program guidance has been provided by OSD concerning real property maintenance objectives during the FYDP?

General Hilmes. The Defense Guidance issued by OSD this year sets forth certain facilities programming objectives. Two of these concern real property maintenance in particular. These are: (1) improve living and working conditions and (2) reduce the backlog of maintenance and repair to the fiscal year 1978 Congressional containment level at the earliest possible date, but not later than fiscal year 1988. The guidance is even more specific about improving living and working conditions. It calls for commitment of adequate resources to achieve steady improvement through 1988, with priority attention to enlisted living and working conditions first in Europe, second in other overseas locations, and third in the United States.

IMPROVE LIVING AND WORKING CONDITIONS

Senator Humphrey. What objectives has the Army imposed for itself in this area during the same period?

General Hilmes. The Army plan contains a goal to improve living and working conditions by integrating MILCON plant replacement and modernization projects with planned maintenance and repair projects, and reducing the backlog of maintenance and repair (BMAR) to a manageable level of approximately $300 million per year by fiscal year 1987 with that position maintained thereafter.

The Army Guidance this year calls for innovative plans to achieve BMAR reductions and provides specific direction on integrating maintenance and repair requirements with Military Construction, Army programs at all levels. Project selection is to insure that work is done on a "first needs" basis, with utilities systems and troop living and working areas receiving priority attention.

PRIORITIES IN EXECUTION

Senator **Humphrey**. How does the Army insure that maintenance funds are directed toward the highest priority projects?

General **Hilmes**. The Army issues command specific guidance three times a year to each of 14 major commands (MACOM's) concerning execution of real property maintenance activities. This guidance specifies that a certain amount of dollars have been provided to fund specific incremental issues. However, the base program is not so defined and is subject to decisions made at the installation level based on local needs. The Army does have in effect general guidance and project selection criteria. This calls for accomplishment of the highest priority projects first—more specifically, the utilities systems and facilities that directly relate to readiness and quality of life for the soldiers. This translates, of course, to improving living and working conditions first. The Army monitors progress quarterly by reviewing reports submitted by the MACOM's which tabulate obligations of funds by facilities category. Since we know where the major problems are by facility category, this enables us to see if that is where the dollars are being spent. Perhaps the most important part of our control function is the onsite staff visits and participation of my staff in some in-process reviews which periodically assess progress being made toward meeting the objectives for facilities maintenance. The onsite visits enable us to actually see the improvements being made and also the problems that still must be solved. The in-process reviews are quite valuable in bringing all participants together who must perform certain functions to successfully execute the real property maintenance program. These reviews are most prevalent in Europe and of course that is where the greatest backlog problem exists.

DEGRADED ARMY COMMANDS

Senator **Humphrey**. Which Army commands are most degraded in terms of readiness due to a lack of funding in real property maintenance?

General **Hilmes**. The Army commands most degraded in terms of readiness due to a lack of funding in real property maintenance would be those whose soldiers are most affected by deteriorated facilities. There is no known method for measuring the direct effect of inadequate facilities on readiness, but it is known that some soldiers leave the Army because living and working conditions are less than satisfactory. This does impact on readiness when well trained soldiers leave the service. Also, we know that inadequate maintenance shops, training facilities, administrative buildings, and other similar facilities can adversely affect the way that a soldier gets his job done. On this basis, those commands most degraded in terms of readiness would be USAREUR (Europe), USAEIGHT (Korea), and Forces Command in the United States.

Senator **Humphrey**. What Army commands have the greatest demand for real property maintenance?

General **Hilmes**. Three Army commands have the greatest recurring demand for real property maintenance. Together, they comprise 81 percent of the annual needs exclusive of BMAR considerations. These are Forces Command (24.7 percent), USAREUR (35.4 percent), and Training and Doctine Command (20.9 percent). These commands need at least three quarters of a billion dollars every year just to finance annual maintenance and repair requirements.

ARMY COMMANDS WITH LARGEST BMAR

Senator **Humphrey**. Which Army commands have the largest BMAR?

General **Hilmes**. There are four Army commands with very large backlogs of facilities maintenance. Together, these four MACOM's share almost 95 percent of the total BMAR. USAREUR (Europe) has the most disproportionate share with 55.5 percent, Forces Command has 19.1 percent, Training and Doctrine Command has 12.1 percent, and USAEIGHT (Korea) has 7.9 percent. These are based on the actual reports submitted by the MACOM's at the end of fiscal year 1981 when the total backlog reached an all time high of $2,288.1 million.

REPROGRAMING

Senator **Humphrey**. What net amount was reprogramed out of real property maintenance accounts for other purposes in fiscal year 1983, fiscal year 1981?

General **Hilmes**. The final obligations for fiscal year 1981 indicate that no dollars were reprogramed out of the real property maintenance accounts in fiscal year 1981. In fact, the budget supplemental for 1981 added $58 million net to the maintenance and repair account, and the actual obligations exceeded even that amount after the transfers at year-end from other functional accounts. Army facilities engineers spent $913 million in 1981 on maintenance and repair of real property.

The Army has only recently completed the fiscal year 1983 President's Budget, and there have been no reprograming actions from the requested level of funding. During the review of the earlier budget submitted by the Army to OSD/OMB, there was a program budget decision to reduce funding levels for real property maintenance by $200 million as a result of "migration". This term refers to the transfers at year-end from other functional accounts.

FISCAL YEAR 1982 SUPPLEMENTAL

Senator **HUMPHREY**. What will be the RPMA funding required for zero backlog growth in fiscal year 1983 if the fiscal year 1982 supplemental is not approved?

General **HILMES**. The amount requested for real property maintenance in the fiscal year 1983 President's Budget was formulated with the objective of no backlog growth in fiscal year 1983. This objective can be met generally speaking, that is, there will be some growth in most MACOM's but this will be offset by reductions in Europe. The net change being estimated now is that BMAR will decline from $2,056 million to $2,036 million if there is no supplemental in 1982. If the supplemental is approved by the Congress, the backlog would be reduced from $1,781 million to $1,736 million in fiscal year 1983.

READINESS IMPROVEMENTS

Senator **HUMPHREY**. From the depot maintenance perspective, what are the most important measurements or "yardsticks" of materiel readiness?

General **WELCH**. There is not the same direct correlation between depot maintenance and the materiel readiness of units as there is with lower echelons of maintenance, such as direct and general support units. The reason for this is that depot maintenance is a subset of supply and items are overhauled or repaired for stock rather than for direct return to a specific unit.

A valid indication of the readiness impact can, however, be derived from the number of equivalent units produced by the maintenance program. For example, the fiscal year 1983 program will provide the following battalion or battery equivalents for selected systems.

Item	Quantity	Unit equivalent
M109 SP Howitzer	185	10 155mm, SP FA Battalions.
M113 APC	1,715	27 Mech Inf Battalions.
M60 Tank	651	12 Tank Battalions.
Chaparral Missile System	61	5 Chaparral ADA Batteries.

A second measurement is the attainment of a zero backlog. This measure has traditionally been used as an indicator of the state of readiness and sustainability. Zero backlog means that the unserviceable equipments requiring depot maintenance are fully financed for accomplishment and return to the supply system in a ready condition.

Another indicator which is not a quantifiable measurement but a prime factor for materiel readiness is the recruitment, training and retention of a highly skilled depot maintenance base. Degradation of this base by over-reliance upon contractors would inhibit expanding the base in time of national emergency. The equilibrium between organic and contractor resources has no established ratio since maintenance of both the commercial and military industrial mobilization base is required and each system or equipment must be considered on an individual basis.

Senator **HUMPHREY**. How does the fiscal year 1983 program contribute to improvements in these areas over previous years?

General **WELCH**. The fiscal year 1982 program will meet the depot maintenance objective of a zero unfinanced backlog. With the requested depot maintenance funds, this same objective can be sustained through fiscal year 1983. The fiscal year 1983 financed program will provide for the induction of all unserviceable candidates and the return of these items to the supply system.

WORKLOAD OPTIONS

Senator **HUMPHREY**. What kinds of depot maintenance activities are contracted out? In what proportion? What trends have evolved?

General **Welch**. The types of depot maintenance activities contracted out are diverse in nature and include the overhaul of such items as aircraft airframes and components, missile systems and components, communication and electronic equipment, and Army vessels. The decision to contract is based on a number of factors and the Army supports this concept in those cases where the items lend themselves to this alternative.

The proportion of contract vis-a-vis organic for the total program averages approximately 30 percent and 70 percent, respectively. Department of Defense Directive 4151.1 states that organic maintenance peacetime capacity will be planned to accomplish no more than 70 percent of the gross mission essential depot maintenance workload requirements. The proportion for items within various commodity groups varies with the types and quantities of systems and equipment.

Illustrative of the above is the following distribution for fiscal year 1982 and fiscal year 1983. The combat line includes Mainz Army Depot in Germany, a Government Owned Contract Operated (GOCO) facility which constitutes a significant portion of our combat vehicle program.

[In percent]

Commodity group	Contract	
	Fiscal year 1982	Fiscal year 1983
Combat	32	34
Missile	36	41
Aircraft	38	48
All other	20	26

In general, the contractor/organic distribution has been relatively stable. Greater use of contractor support tends to occur in certain instances. For example, newly fielded items for which expertise has not yet been developed within the depot system are initially maintained on contract. In most of these cases, depot level maintenance of these items ultimately will be accomplished in a depot. The current force modernization program exemplifies this characteristic for as the number of newly developed items introduced into the Army inventory grows, there will be greater reliance on contractor support for a period of several years until the depot capability has been fully developed. However, a few systems will be contract supported throughout the life cycle of the item. These are exceptional cases however.

Senator **Humphrey**. What role does support of Foreign Military Sales play in workload planning?

General **Welch**. In terms of workloading the total depot maintenance program (all customers), Foreign Military Sales maintenance requirements are considered in workload planning and manpower availability. The FMS program has minimal impact on the depot workforce but the diversion of equipment from the Army inventory to FMS customers does cause occasional perturbations since the production schedule may be temporarily supporting security assistance requirements.

Senator **Humphrey**. Describe the constraints which prevent more efficient management of Army depots.

General **Welch**. The three most significant constraints that have affected efficient management of the depot maintenance hardware program are civilian personnel ceilings and hiring limitations, untimely receipt of funding and changes in funding levels, and repair parts and modification kit availability.

First, the manpower ceilings and hiring limitations have restricted our ability to execute the Depot Maintenance Program and can lead to costly inefficiencies and excessive maintenance carryover. These in turn, have led to subsequent funding reductions. The Army Industrial Fund was designed to function as a commerical operation providing services to their customers. To be effective, the industrial fund must be able to respond to customer demands for fully funded work.

Second, because of funding fluctuations the Army Industrial Fund is subjected to unprogramed changes that cannot be readily responded to due to inability to expend or contract its work force.

Third, extended procurement lead time, contractor slippage, and cost escalation lead to repair parts and kit shortages which impact on timely execution of production schedules.

Programs and budgets for depot maintenance must be predicated on a correlation of resources—both funding and manpower—to the projected workload.

Senator **Humphrey**. What is the optimum workload mix (in-house vs. contract) and management profile (efficient, stable workforce) in the Army's view?

General **Welch**. The overriding consideration of workloading is to maintain both commercial and military industrial bases. Depot maintenance workload is examined in reference to having a responsive organic base for support of combat forces and rapid expansion in the event of mobilization. Any requirements above that level are eligible for contracting out. Decisions relative to contracting out are made on the basis of economics, ready availability of capability, and cost-effectiveness. Thus, the mix will vary with the commodity involved.

Senator **Humphrey**. What is the Army view of the "zero backlog" objectives? Does this budget represent a prudent and efficient mix of the possible versus the desirable?

General **Welch**. Zero backlog has traditionally been used as an indicator of the state of readiness and sustainability. It is the best measure we know of in the Depot Maintenance area.

The Army considers zero backlog to apply only to those requirements which are executable. Considering the total projected Depot Maintenance requirements, the requested funded programs contained in this budget represent a prudent and efficient mix of the possible versus the desirable.

FINANCING PLANT IMPROVEMENTS

Senator **Humphrey**. New industrial fund rates are supposed to include increases that will be directed to capital improvements. How much will be generated towards this purpose in the fiscal year 1983 depot maintenance program?

General **Welch**. The fiscal year 1983 depot maintenance industrial fund rates include depreciation expense in the amount of $25 million. The depreciation expense comprises charges for all capital equipment previously received by the Army Industrial Fund depot activities.

Depot Maintenance Activities are planning to place equipment orders relative to the new policy of approximately $100 million in fiscal year 1983. Of this amount only 20 percent or $20 million is expected to be delivered in fiscal year 1983. The cost of this equipment will be recovered in future years through a depreciation expense. It is estimated that the $100 million of equipment to be purchased in fiscal year 1983, when delivered and installed, will add an annual depreciation expense of about $5 million in future years. This depreciation expense of $5 million per year equates to less then one-third of one percent of the depots' costs. Accordingly, depreciation expenses are not considered to have any significant adverse impact on industrial fund customer rates.

AVERAGE ANNUAL COST OF REPAIR

Senator **Humphrey**. What is the current average repair cost as a percentage of acquisition cost? What have been the trends in this area?

General **Welch**. On average, the return of equipment to serviceable condition costs 25 percent of new equipment; that is, it is 75 percent less expensive to overhaul an item than it is to acquire it new. In absolute terms, the cost to repair equipment is increasing. As a function of acquisition cost, however, we do have trends which show a declining cost for a number of systems. Examples of where overhaul is substantially less than acquisition are the components for the Improved Hawk Missile System and the airframes for the UH-1 Helicopter.

[In percent]

	Fiscal year 1981	Fiscal year 1982
Battery Control Central—Improved HAWK Missile	25	12
UH-1	20	16

The M113A1/A2 Armored Personnel Carrier represents a different trend for items undergoing overhaul and conversion. In this instance, the cost to depot maintenance is greater than 25 percent of the acquisition cost, but the cost to overhaul in conjunction with conversion is 59 percent less expensive than to procure a new M113A2.

Senator Humphrey. How do average repair costs relate to the age of the system?

General Welch. The tendency is for average costs to grow as the system ages. This trend is affected by variables such as inflation and the difficulty of attaining parts for aging systems. Army Regulation 750-1 provides guidance on maintenance expenditure limits which establish the maximum amount of funds that may be spent for depot level maintenance of an item. The item is computed by multiplying the current replacement cost of the item by 65 percent. The Army Regulation recognizes waivers, however, when depot maintenance is the only source of supply.

Senator Humphrey. What are the strengths and limitations of this "yardstick"?

General Welch. The cost of overhaul as a percentage of acquisition costs has limited application in determining the funding requirements. One application is with new items of equipment entering the inventory for which no or limited depot level maintenance experience is available. In these cases, a percentage of acquisition cost based on engineering estimates is used to establish initial program. As maintenance experience is gained on the item of equipment the percentage estimate is replaced with actual manhour and parts data. The second application of a percentage of acquisition cost relates to aging equipment or items no longer in production. The Army has established a Maximum Expenditure Limit (MEL) for maintenance of equipment. This limit is 65 percent of acquisition cost. If the cost to overhaul exceeds this maximum limit, when depot maintenance is the only source of supply, a waiver is granted.

AIRFRAME COSTS

Senator Humphrey. In fiscal year 1982 the Army is overhauling 911 airframes at a cost of $107 million. In fiscal year 1983 the Army proposes only 831 airframes, but at a cost of $116 million. How do you explain this increased cost for a smaller workload?

General Welch. The fiscal year 1983 budget reflects an overhaul/repair program of 843 airframes at a cost of $90.0 million in fiscal year 1982 and 763 airframes at a cost of $93.1 million in fiscal year 1983. There are two basic reasons for this increased cost for a smaller workload.

First, inflation plays a role in that materiel costs and labor are greater. For example, in fiscal year 1982 the cost for the depot maintenance of observation airplanes (OV-1—MOHAWK) averages $303,833 per airplane. In fiscal year 1983, the average cost per "bird" is estimated at $320,373. These figures are in then year dollars.

The second factor relates to the "mix" of aircraft and differences in the scope of work performed. For example, the figures below illustrate how these variables can affect the total program quantities and costs.

Item	Quantity	Average cost	Total cost
AH-1:			
Fiscal year 1982	207	$91,710	$18,984,000
Fiscal year 1983	112	103,071	11,544,000
OH-58:			
Fiscal year 1982	136	62,125	8,449,000
Fiscal year 1983	209	76,382	15,964,000

MANAGEMENT AND EFFICIENCIES

Senator Humphrey. What efforts have been taken to consolidate depot maintenance activities; reduce the overall costs of the depot maintenance program; and improve depot maintenance standards.

General Welch. On September 22, 1981, the Army announced its decision to consolidate the Army aircraft maintenance mission and function at New Cumberland Army Depot, Pa., with a similar activity at Corpus Christi, Tex. Specifically, this move is being made to save annual operating expenses estimated at $13.7 million. The Army is making progress in the implementation of Reliability Centered Maintenance (RCM). All combat vehicles and self propelled artillery (SPA) are now being inducted as depot maintenance candidates using combat vehicle evaluation criteria vice mileage and age. Of 498 tanks evaluated in fiscal year 1981, 48 qualified as depot maintenance candidates and were inducted. The M113 family of vehicles; M60 tank and M110 SPA Depot Maintenance Work Requirements (DMWR) have been scrubbed to reduce cost under the RCM umbrella. To expedite the implementation of RCM, the Army has initiated a program to identify other DMWR's applicable for review to reduce maintenance requirements and associated cost.

Work measurement standards are derived from the Army methods and standards program and are developed through engineered estimates, time studies, or statistical analysis. Current regulations require validation at the time of preparation. These standards represent the direct labor hours required to complete a particular end item; these standards are the basis for labor requirements estimates used in development of fixed prices. In development of fixed price, historical averaging of prior cost is no longer done. Fixed prices and the budget are developed concurrently as part of an integrated process. Dollar rates per manhour, based on the budget, for the various categories of expense are applied to the standards to develop estimated costs. Adjustments are then made for projected productivity increases from a new capital equipment and improved methods, cost growth, and recoupment of prior year gains or losses to derive a fixed price—the revenue to be achieved from the production of each end item. Cost estimates are validated prior to use in budgeting.

MAINTENANCE SUPPORT ACTIVITIES

Senator **Humphrey**. Why is there such a shortfall between requirements and funding for Maintenance Support Activities?

General **Welch**. There has been a chronic shortfall in Maintenance Support Activities over the years. It is necessary to defer some important programs to achieve a balanced and prioritized Army program. In essence, we cannot afford to solve the Maintenance Support program in 1 year. The cost of this, is that we forego benefits such as speedier implementation of Reliability Centered Maintenance, the availability of up-to-date maintenance publications in the field, and the investigation of suggested improvements to our equipment.

Questions Submitted by Senator Carl Levin

DEPOT MAINTENANCE

Senator **Levin**. General Welch, you indicate in your statement that the fiscal year 1983 budget eliminates the unfinanced depot maintenance backlog carried over from previous years. What do the outyears of the current 5-year defense program look like? Is the Army's depot maintenance program funded at a level sufficient to prevent growth of depot maintenance backlogs in fiscal years 1984-87?

General **Welch**. The following reflects the dollars as reflected in the 5-year Defense program for the Depot Maintenance Hardware program.

Fiscal year:	*Dollars*
1984	$1,147,891
1985	1,449,478
1986	1,589,619
1987	1,429,200

Depot Materiel Maintenance backlogs for fiscal year 1982 and 1983 are projected to be zero. Due to competing requirements and other Army priorities, the zero backlog cannot be sustained through fiscal year 1984. It is the Army's plan, however to program sufficient resources to eliminate the depot maintenance hardware backlog by end fiscal year 1985 and maintain a zero backlog through fiscal year 1988 as is in accordance with published Army and Defense guidance.

Senator **Levin**. General Welch, I am interested in your comments on the Maintenance Support Activities portion of the fiscal year 1983 Army Depot Maintenance request.

According to your statement, Maintenance Support Activities provide the resources for engineering support, training and many other activities critical to the successful fielding of new weapons systems.

In fact, you conclude your prepared statement by saying that resource shortfalls in these Maintenance Support Activities will result in decreased readiness.

I am disturbed by two charts in your statment that suggest that the fiscal year 1983 budget for Maintenance Support Activites is underfunded and that readiness is going to suffer.

The first chart, showing total program dollars for Maintenance Support Activities, shows fiscal year 1983 funding of $476 million against a requirement of $727 million, a $251 million shortfall.

The second chart shows manpower spaces for Maintenance Support Activities, with a gap of almost 2,500 personnel between your authorized strength and your requirement.

In fact, your fiscal year 1983 manpower authorization is almost 400 below your fiscal year 1982 level.

You raise the question I want to ask in your own statement, General Welch, but you don't answer it: What will be the impact of these shortages on the Army's ability to support newly fielded and existing weapons systems?

General **Welch**. Resources have been provided for new systems falling under "Equipping the Force", but in general, older systems are not fully funded. Without the required resources, we cannot do all of the needed publication updates, maintenance engineering, and training. As a result, maintenance personnel at all levels will be less efficient, thereby increasing maintenance costs and returns of serviceable material to the depot level. Under these conditions the quality of maintenance throughout the Army will suffer, thereby degrading readiness.

Senator **Levin**. What is the reason for these shortfalls? Did you request additional funds and personnel from OSD and OMB in fiscal year 1983 for Maintenance Support Activities that were denied?

General **Welch**. These shortfalls are long standing, and could not be eliminated in a single year. Some additional funding and manpower for fiscal year 1983 were requested from OSD and OMB, but were denied, either as part of specific reductions or as part of overall Army reductions.

Senator **Levin**. These shortfalls lead me to conclude that somewhere—and maybe not necessarily only in the Army—this budget is out of balance between procurement and O. & M. Isn't it fair to conclude from these two charts that we are continuing to invest heavily in new procurement programs and ignoring the support tail in O & M for the weapon systems to be used once they reach the field?

General **Welch**. The charts do reflect that the Army is continuing to invest heavily in new procurement programs. It has been Army policy to place its greatest emphasis on the Equipping the Force program. To support this policy, the fully funded Equipping the Force program provides the required dollars for those systems which are being newly fielded in an effort to provide balance to the Army procurement program. Sufficient resources are not available to fully support those older systems which are already fielded.

BMAR IN EUROPE

Senator **Levin**. General Hilmes, 55 percent—almost $1.3 billion—of the Army's total Backlog of Maintenance and Repair (BMAR) is in Europe. Clearly, the condition of our Army facilities in Europe is much worse than any other area.

How did this situation in Europe get so out of hand?

General **Hilmes**. The current situation in Europe reflects years of neglect. This neglect was not deliberate—it happened because many factors combined to bring it about. Some of these factors were political in nature. Specifically, the US presence in Europe has been on a "one year at a time" basis which discouraged long-range programming to construct, repair and maintain facilities. Although the West German Government, through "OFFSET" agreements in 1971 and 1974, did provide approximately $100 million per year for six years to rehabilitate US troop facilities, there has been considerable pressure to get more support from the host nation. This pressure was being manifest as constrained and underfunded facilities programs for 10 years or more. Other factors are fiscal in nature. Facilities maintenance was not perceived as a critical problem until 1978 when the Congress instituted a containment policy aimed at gradually reducing the backlog by holding the total amount at a constant level, thereby reducing it as inflation would drive more projects from the allowable backlog level over the years. This policy was not backed up with sufficient dollars from sources within OSD or DA to enable the Army to halt backlog growth. Also, the competing programs to modernize and improve the readiness of the force absorbed the major part of program growth in the budget in recent years. Thus, little was available for facilities maintenance. In fact, in 1980 the maintenance and repair of real property account suffered significant program shrinkage, even after allowing for cost growth. Other factors causing backlog growth in Europe were inflation, deterioration, and currency fluctuations. Even if no new projects had made the backlog lists in Europe, double-digit inflation adds more than $100 million per year to the existing backlog. Deterioration further exacerbates the problem—the Army conservatively estimates that this increases the existing backlog by 3 percent per year. The disastrous slump of the American dollar in 1980 and 1981 caused the backlog number to get bigger. Today, a change of one pfenning in the Deutsche mark-US dollar exchange rate changes the backlog by $4.9 million. When you add to all of the above the fact that dollars allocated to Europe were insufficient to fund annual recurring requirements and new projects were being listed as backlog work every year, it is not surprising that such growth in the backlog occurred. Fortunately the fiscal year 1982 appropriation and the 1983 budget request provide sufficient resources to begin to reverse this trend in Europe. The objective of facilities engineers in Europe is to effectively execute these improved programs and achieve backlog reductions.

NATO CONTRIBUTIONS TO M. & R.

Senator **Levin**. General Hilmes, do our NATO allies make any contributions to the maintenance and repair of our military facilities through NATO infrastructure funding?

If not, do you think they should? If so, what has been the level of funding provided through NATO channels for maintenance of Army facilities?

General **Hilmes**. No. NATO funds provided by the pooling of national funds from the participating nations are for capital construction of operational facilities only. The user nation has financial responsibility for the operation and maintenance of common funded projects. The financial responsibility fc and execution of maintenance of NATO-occupied or assigned facilities are borne by the user or users in either peacetime or wartime. I am not in a position to directly influence or change the existing agreements between the US and its NATO allies.

1983 FACILITIES MAINTENANCE

Senator **Levin**. General Hilmes, according to your statement, the Army "has an urgent requirement for an additional $300 million for facilities maintenance in fiscal year 1983."

Did the Army include this additional $300 million for facilities maintenance in its fiscal year 1983 budget submission to OSD and OMB? Were the funds for real property maintenance requested by the Army in fiscal year 1983 reduced by OSD or OMB?

General **Hilmes**. Yes, the Army does have this urgent requirement. The fiscal year 1983 budget submission to OSD/OMB included an additional $200 million for facilities maintenance above the amount in the fiscal year 1983 President's Budget. The $200 million was reduced by OSD from the Army request in a program budget decision which cited the transfers of funds at year-end in 1981 as the basis for the decision. The Army was not successful in its reclama to OSD.

ARMY'S 1982 SUPPLEMENTAL REQUEST

Senator **Levin**. General Hilmes, the Army's fiscal year 1982 supplemental request includes $275 million for real property maintenance.

Was this supplemental request for real property maintenance initiated by the Army or by OSD?

Wouldn't it make more sense to include these funds in the fiscal year 1983 budget than in a fiscal year 1982 supplemental so that the funds could be spent in a more orderly and efficient manner?

What will be the effect on the Army's Backlog of Maintenance and Repair if the fiscal year 1982 supplemental is not approved?

General **Hilmes**. The answers to the questions concerning the fiscal year 1982 supplemental request are:

(1) The supplemental request for real property maintenance was initiated by the Army based on a program budget decision issued by OSD during the budget review process.

(2) Actually, no. The $275 million for real property maintenance could be effectively and efficiently executed in 1982, even as late as September. The existing backlog of facilities maintenance projects is so huge that we are assured that the money will be applied to high priority needs. Army facilities engineers are in the process now of completing design work and posturing the procurement packages for obligations of these additional funds in the fourth quarter. Further, the economic situation today is conducive to getting better competitive bids from prospective contractors and inflation will continue to drive costs upward over time. In other words, we can get more done with the same $275 million in fiscal year 1982 than we could in fiscal year 1983.

(3) If the supplemental is not approved, the Army estimates a year-end 1982 backlog of $2,056 million instead of $1,781 million, which is the estimate when considering the allocation of supplemental funding to the major commands.

FACILITIES AND DEPOT MAINTENANCE

Senator Levin. What is the Army's position on the proposed transfer of consumable item management from the individual services to the Defense Logistics Agency?

Answer. The Army's position is that this transfer has a significant potential for degradation in readiness and sustainability of the U.S. Army. This transfer trades off a proven operating support system for unsubstantiated savings. The Army feels that due to the specialized nature of service requirements the service is best equipped to manage weapons system consumables.

OSD has directed the transfer of 200,000 consumables to the Defense Logistics Agency. The Army is fully committed to making every possible effort to sucessfully execute the directed transfer. A joint implementation plan has been developed to provide for the orderly transfer of records for the assigned items. Recognizing current DLA and service implementation plan efforts to address our concerns, identification and problem resolution could contribute to a degraded readiness posture. The plan also calls for documentation of certain non-recurring cost elements associated with the transfer and the evaluation of selected aspects of performance by the Defense Logistics Agency for the reassigned items. The Army has completed all implementation actions required to date and expects to remain on the schedule specified in the joint plan.

The Army has recorded two ojections to the joint plan. First, while the Office of the Secretary of Defense has recognized the need for a flexible evaluation period, the evaluation process should continue through at least a 24 month period for the transferred items. This is necessary to permit an assessment of the DLA management process and capability. Secondly, the plan does not contain provisions for other cost elements which the Army feels should be used in determinations of whether additional items will be transferred.

Senator Levin. What types of items will the Army be transferring to the Defense Logistics Agency under the initial 200,000-item transfer currently in progress?

Answer. The Army took considerable efforts to provide a proportionate mix of Army inactive items; weapons system and commodity type items; stocked and nonstocked items; intensively managed and routinely managed items in support of a broad range of weapon systems.

Senator Levin. What will be the impact on Army materiel readiness, if any, of this proposed transfer?

Answer. This has been the Army's chief concern with the transfer, its potential impact on readiness. The impact is yet to be determined. No readiness assessment has been made to date. The current transfer is being used as a test to determine the impact on readiness. This is the reason the Army feels at least two years will be required to adequately assess the impact. The risks we run are that the management techniques employed by DLA do not incorporate weapons program data which identifies scheduled changes in end item utilization. Historical demand data for the part will not provide sufficient parts where significant increases are scheduled for end item use. Detection of this problem when a part goes to zero balance could result in deadlining numerous end items for an average of 24 months procurement leadtime.

Senator Humphrey. Thank you very much, General Welch and General Hilmes.

The subcommittee stands adjourned.

[Whereupon, at 11:15 a.m., the hearing of the subcommittee was adjourned.]

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

TUESDAY, MARCH 16, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

ARMY, USMC, AND AIR FORCE AMMUNITION PROGRAMS

The subcommittee met, in open session at 11 a.m., in room 224, Russell Senate Office Building, Hon. Gordon J. Humphrey (chairman) presiding.

Present: Senators Humphrey and Levin.

Staff present: Michael B. Donley, professional staff member; Paul C. Besozzi, minority counsel; David S. Lyles, José E. Martinez, professional staff members; and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony concerning the fiscal year 1983 requests for conventional ammunition.

We are pleased to have with us Maj. Gen. Lawrence Skibbie, Director of Army Combat Support Systems; Brig. Gen. W. G. Carson, Jr., Director of the Marine Corps Material Division; Brig. Gen. William Bowden, Deputy Director of Air Force Logistics, Plans, and Programs, and Brig. Gen. Peter Burbules, Deputy Executive Director, Single Manager for Conventional Ammunition.

Fiscal year 1983 marks the first year that the Armed Services Committee will authorize conventional ammunition. In this process, the Preparedness Subcommittee is charged with review of three accounts: Army ammunition, Marine Corps ammunition, and Air Force munitions and associated equipment.

While the subcommittee has no established track record on ammunition procurement, our present responsibilities are an outgrowth of our oversight for readiness and sustainability issues. At the same time, we are aware that several ammunition programs have been controversial, and we will seek out background information on these programs in our efforts to better understand the nature and direction of ammunition procurement.

Our principal interest today will be centered on the development of ammunition requirements, the effect of the 1983 program on training, and service plans for building war reserves in the 5-year defense plan.

We will begin in open session by receiving testimony from General Skibbie, General Carson, and General Bowden, in that order. At the conclusion of the open session, the witnesses will have an opportunity to expand upon their testimony in panel format.

General Skibbie, may we have your statement?

STATEMENT OF MAJ. GEN. LAWRENCE F. SKIBBIE, DIRECTOR, COMBAT SUPPORT SYSTEMS OFFICE, DEPUTY CHIEF OF STAFF RESEARCH, DEVELOPMENT, AND ACQUISITION, ACCOMPANIED BY BRIG. GEN. PETER G. BURBULES, DEPUTY EXECUTIVE DIRECTOR FOR CONVENTIONAL AMMUNITION

General SKIBBIE. Mr. Chairman, the Army's fiscal year 1983 budget requests $2.6 billion for procurement of ammunition hardware, and support of the ammunition production base.

This budget is based upon a force packaging methodology which equips first those which fight first—essentially the forward-deployed and the early deploying follow-on forces; and then provides a balance between high-priority training needs and war reserve stock.

We continue to emphasize buildup of war reserve inventory to support contingency and war plans, and to maintain an active or warm production base sufficient to provide some of each type of munition until mobilization actions can expand the total production base to provide sustained support.

Measured in days of supply, our ability to sustain our combat forces will be modestly enhanced by this ammunition budget.

With your approval, I would like to enter my detailed statement for the record and summarize that information with a short briefing.

Senator HUMPHREY. Fine.

[The prepared statement of General Skibbie follows:]

THE ARMY AMMUNITION PROGRAM—MAJ. GEN. L. F. SKIBBIE

Mr. Chairman and Members of the subcommittee, the fiscal year 1983 budget contains $2,639.0 million for procurement of ammunition hardware and support of the ammunition production base. This budget is based upon a force packaging methodology which emphasizes support for forward deployed and early deploying follow-on forces and provides a balanced trade-off between high-payoff training needs and war reserve requirements. The Army continues to emphasize buildup of war reserve inventories to support contingency and war plans and maintenance of the active base until mobilization actions energize and expand the total base for providing the necessary sustained support. Measured in consumption days of supply, this budget will add significantly to our stockpile of modern munitions.

The $2,205.6 million requested in fiscal year 1983 for ammunition hardware provides for worldwide training consumption, losses to inventory through the fiscal year 1983 funded delivery period, procurement of modern hardware, and buildup of war reserve stocks toward the U.S. authorized acquisition objectives.

The following shows distribution of fiscal year 1983 ammunition hardware by category and type:

FISCAL YEAR 1983 AMMUNITION HARDWARE REQUEST

	Percent	Millions
Category:		
Training unique		$524.5
Training standard		233.1
War reserve		1,387.5
Nonhardware		60.5
Total		2,205.6
Type of ammunition:		
Tank ammunition	10	219.0
Fuzes	5	108.0
Artillery ammunition	37	818.2
Small arms ammunition	23	502.7
Mortar ammunition	5	106.9
Atomic materiel	1	22.6
Propelling charges	4	89.9
Rockets	8	178.8
Other	4	99.0
Nonhardware	3	60.5
Total		2,205.6

TANK AMMUNITION

Funds totaling $219.0 million are being requested for tank ammunition, in support of training requirements and war reserve buildup.

Tank ammunition

	Millions
Cartridge, 105mm, TP-T (target practice—tracer)	[1]$53.3
Cartridge, 105mm, DS-TP (discarding sabot—target practice)	[1]85.5
Cartridge, 105mm, APFSDS-T	[2]69.3
Cartridge, 120mm, HEAT-MP-T	[2]2.3
Cartridge, 120mm, TP-T	[1]2.4
Cartridge, 120mm, TPDS-T	[1]3.4
Cartridge, 120mm, APFSDS-T	[2]2.8
Total	219.0

[1] Training ammunition, (144.6).
[2] War reserve, (74.4).

The funds associated with 105mm tank training and war reserve ammunition requirements are for rounds fired from the main gun cannon mounted on tank models M1, M60, M60A1, M60A2, M60A3, and M48A5. The budget includes the initial buy of 120mm ammunition for the German 120mm gun system on the M1 Abrams tank. The training rounds are needed to support annual tank qualification/familiarization firing. The funds for war reserve purchase 105mm and 120mm armor-piercing, fin-stabilized, discarding sabot with tracer (APFSDS-T) and 120mm high-explosive anti-tank multipurpose with tracer (HEAT-MP-T) ammunition. The APFSDS-T cartridges, which have increased capability and reliability, will replace the older version of armor-piercing, discarding-sabot ammunition. Both APFSDS and HEAT rounds are intended for use against armor targets.

FUZES

$108.0 million is requested to support three different types of fuzes for artillery projectiles.

Fuzes

	Millions
Fuze, proximity	$47.2
Fuze, point detonating	9.4

	Millions
Fuze, mechanical time	51.4
Total	108.0

The proximity, point detonating, and mechanical time fuzes are required to balance with on-hand projectile assets at the end of the fiscal year 1983 funded delivery period. Proximity and PD fuzes are required for use with 105mm, 155mm, 175mm, and 8-inch projectiles. The mechanical time fuze program supports inventories and planned procurement programs of the new ICM/ADAM/RAAMS (improved conventional munition/area denial artillery munition/remote antiarmor mine system) family of munitions.

ARTILLERY AMMUNITION

The $818.2 million requested constitutes 37 percent of the total ammunition hardware program we propose.

These funds will support war reserve buildup for new modernized artillery ammunition and training.

War reserve artillery ammunition

	Millions
Projectile, 155mm, HE	$18.5
Projectile, 155mm, HE, ICM, (DP)	237.3
Projectile, 155mm, HE, RAP	17.7
Projectile, 155mm, HE, ADAM	57.9
Projectile, 155mm, HE, RAAMS	98.6
Projectile, 155mm, HE Copperhead	183.6
Projectile, 155mm, WP, smk screening	16.1
Projectile, 8-inch, HE, ICM (DP)	104.2
Projectile, 8-inch, HE RAP	44.9
Chemical munitions	18.4
Total	797.2

The projectile, 155mm, HE, ICM, DP (high-explosive, improved conventional munition, dual-purpose), at $237.3 million and the 8-inch version, at $104.2 million, account for 42 percent of the funding requested for artillery ammunition. These are the new improved rounds used against personnel, vehicles, and light armor.

$17.7 million is requested for the projectile, 155mm RAP, and $44.9 million for the 8-inch HE RAP. The RAP (rocket-assisted projectile) is a high-explosive round with a rocket motor attached to the projectile base. This rocket assist extends range capability, yet the ease of operation common to conventional artillery munitions is maintained.

We are requesting $57.9 million for the 155mm HE ADAM (area denial artillery munition), and $98.6 million for the projectile, 155mm, HE, RAAMS (remote antiarmor mine system).

$183.6 million is requested for the projectile, 155mm, HE, Copperhead, which has a laser terminal homing capability. All of these 155mm projectiles are fired from the M109A1, A2, A3, and M198 howitzers.

Artillery training ammunition

	Millions
Cartridge, 14.5mm	$1.8
Projectile, 155mm, training	19.2
Total	21.0

The 14.5mm training cartridge is fired from the m31 field artillery trainer which, in turn, is mounted in 105mm, 155mm, and 8-inch howitzers and provides an inexpensive, subcaliber, live-fire training method for artillery forward observers, fire direction personnel, and gunners.

The projectile 155mm training round is a heavy-wall, hollow-core, forged-steel shell designed for low-cost artillery firing/forward observer training with the 155mm family of howitzers.

SMALL ARMS AMMUNITION

This category totals $502.7 million.

Small arms ammunition

	Millions
Cartridge, 5.56mm, all types	$70.0
Cartridge, 7.62mm, all types	52.7
Cartridge, cal .22, all types	1.2
Cartridge, cal .45, all types	4.6
Limited range/plastic ammunition, all types	10.6
Cartridge, cal .50, all types	93.6
Cartridge, 20mm; all types	21.1
Cartridge, 30mm ADEN/DEFA, all types	64.1
Cartridge, 25mm, Bushmaster, all types	103.8
Cartridge, 40mm, Divads, all types	70.9
Cartridge, 40mm, Conventional, all types	10.1
Total	502.7

Divad gun, 30mm ADEN/DEFA, and 5.56mm saws ammunition warrant discussion as the fiscal year 1983 program includes the first full year of production of these new types of munitions, initially procured in fiscal year 1982.

Divad gun ammunition funding supports production of three types of ammunition. The high-explosive round point-detonating (PD) fuzed cartridge functions when the projectile impacts the target. It is used to defeat fixed-wing aircraft, helicopters, and lightly armored ground targets. The high-explosive proximity fuzed round is a similar cartridge which functions without impact on target. The TP round is a target practice (TP) cartridge and has a completely inert projectile. The cartridge and projectile weights, launch velocity, and time of flight are equal to those of the HE rounds. The TP round is used to train troops.

30mm ADEN/DEFA funding supports production of two new types of ammunition. The HE–DP is an electric-primed, aluminum-cased, fuzed, high-explosive, dual-purpose cartridge for use in the XM230 weapon system. The weapon is used as the secondary armament system on the YAH–64 advanced attack helicopter. The TP–T round is a target practice cartridge used strictly in support of training requirements.

The 5.56mm ball and tracer (SAW) funding supports a ball round which has a steel conical insert in the ogive of the bullet which results in an increased helmet penetration range. The tracer has a longer tracer column and improved pyrotechnic mixture which results in a longer daylight trace time. The rounds are linked to a 4-to-1 mix. They will be used in the squad automatic weapon system (SAWS), which is a lightweight, linked belt-feed, one-man-operated weapon. A 5.56mm blank round linked for the saw is also included.

MORTAR AMMUNITION

Funds of $106.9 million are requested in support of war reserve and training requirements for six types of mortar ammunition.

Mortar ammunition

	Millions
Cartridge, 4.2", high explosive	$24.1
Cartridge, 4.2", illuminating	31.2
Cartridge, 81mm, illuminating	14.9
Cartridge, 81mm, practice, training	10.7
Cartridge, 60mm, HE, lightweight company mortar system	21.6
Cartridge, 60mm, HE/gutted	4.4
Total	106.9

Procurement of 4.2" mortar ammunition is for high-explosive and illuminating rounds used in the M30 mortar. Funding supports both war reserve and training requirements.

Procurement of the 60mm mortar ammunition is for the high-explosive cartridge which is loaded with COMP B; includes 4 horseshoe increments; includes a waterproofed propellant system; is fuzed with a multioption fuze; and is fired from the M224 lightweight company mortar system.

Planned procurement of the standard 81mm cartridge is for the illumination rounds used in the M1 and M39 mortars, and the subcaliber training rounds.

ATOMIC MATERIEL

Funds of $22.6 million requested provide for three elements: Nuclear weapons support materiel and production of DOD components for 8-inch and 155mm nuclear munitions.

CHARGES

Funds of $89.9 million are requested for 155mm and 8-inch propelling charges in support of war reserve buildup requirements and training.

Propelling charges

	Millions
Charge, prop, 155mm, green bag	$45.3
Charge, prop, 8-inch, white bag	44.6
Total	89.9

The 155mm green bag charge is the short-range charge. The 8-inch WB line supports the M188E1 charge. The M188E1 separate loading propelling charge provides extended range in the M110A1 self-propelled howitzer.

ROCKETS

Funds of $178.8 million are being requested in support of training and war reserve requirements for the Viper and the Viper training rounds and 2.75-inch rockets.

Rockets

	Millions
Viper	$107.4
Viper, tracer bullet, trainer	6.3
Rocket, 2.75-inch, LSFFAR, all types	65.1
Total	178.8

The Viper rocket and Viper tracer bullet trainer ammunition replaces the old standard 66mm light antitank weapon (LAW) and 35mm LAW training ammunition. This is the third year of production for these new munitions.

Funding requested in fiscal year 1983 for rocket 2.75-inch LSFFAR all type supports three types of 2.75-inch munitions. The high-explosive (HE) rocket has a 10-pound warhead and a point detonating fuze; the multipurpose submunitions (MPSM) rocket provides lethality against personnel, materiel, and armored targets, with a manyfold increase in antipersonnel effectiveness and in hit probability, and the MPSM practice rocket. The MPSM round also includes a remote-set fuze allowing in-flight capability to vary the standoff range.

OTHER

A sum of $99.0 million is requested for various types of munitions in support of training and war reserve buildup requirements.

Other ammunition

	Millions
Ground-emplaced mine scattering system (GEMSS)	$29.2
Signals, all types	15.5
Demolition munitions	16.4
Simulators, all types	10.4
Items less than $900,000	14.5
Hand grenades, all types	12.5
9th ID high technology test bed ammo	.5
Total	99.0

The ground-emplaced mine scattering system, at $29.2 million, constitutes 29 percent of the funds being requested.

NONHARDWARE

In the last category is $60.5 million identified as nonhardware.

Nonhardware

	Millions
Components for special tests	$1.8
Components for renovation	32.0
Components for prove-out	22.9
Spares and repair parts	1.1
Weapon components in support of ammunition proof and acceptance testing	1.8
Malfunction investigation	.9
Total	60.5

Two line items, components for renovation, $32.0 million, and components for prove-out, $22.9 million, are the major programs in this category.

Components for renovation funding provides for procurement of ammunition components required for use in renovation of unserviceable assets currently in inventory.

Components for prove-out funding provides for confirmation and acceptance of prior year production base modernization and expansion projects to ensure that: (1) the manufacturer is capable of producing an acceptable end product, (2) the manufacturer's warranties are met, and (3) the facility is capable of producing at the design rate specified.

ACTIVITY 2: AMMUNITION PRODUCTION BASE SUPPORT

The ammunition production base fiscal year 1983 program of $433.4 million has as its principal thrust the continuation of and balance with prior year initiatives. In accordance with department of defense guidance, the army is emphasizing procurement of war reserve stocks and financing only those production base projects needed to meet peacetime production requirements. The following summarizes our ammunition production base request:

	Millions
Provision of industrial facilities	$391.8
Layaway of industrial facilities	17.2
Manufacturing technology program	24.4
Total	433.4

The fiscal year 1983 budget includes $33.6 million to support production and replace equipment at 16 active ammunition production plants and three production-related facilities.

A total of $358.2 million is requested for initial production facilities and modernization and expansion projects, which establish the production base capability to produce the new and more effective modernized ammunition items. New production capability is being established or expanded for 105/120mm tank ammunition; for Gator and GEMSS, members of the family of scatterable munitions (FASCAM); the L8A1 red phosphorus smoke grenade and 2.75-inch rocket. These projects are needed to permit the introduction of these modernized items into the DOD inventory with the resultant increase in the readiness and effectiveness of our combat forces.

Another part of the fiscal year 1983 program is the continuation and balance with prior year initiatives. A total of $15.8 million is requested to complete the Mississippi army ammunition plant at Bay St. Louis, Mississippi. This provides additional funding to accommodate unforeseen cost increases, changes, and inflation in the project. Mississippi AAP, when complete, will be capable of producing 120,000 rounds per month of the 155mm, M483 improved conventional munition (ICM). Also continuing prior year initiatives are the restoration of the ammonia oxidation plant at sunflower AAP and expansion of the initial production facilities for the antiarmor cluster munitions and tactical munitions dispenser metal parts. In the area of new initiatives, seven projects totaling $121.1 million provide facilities for the core, projectile metal parts, cartridge case, stub base, load, assemble, and pack for 105/120mm tank ammunition. Two FASCAM projects totaling $17.3 million provide facilities for manufacturing extended tripline sensors and the battery.

The $17.2 million requested for layaway is for the protection and preservation of equipment and facilities no longer required for active production, but which must be retained for future peacetime or mobilization production.

The $24.4 million for manufacturing methods and technology (MM & T) is associated with the modernization and expansion program. This program improves ongoing production processes to achieve cost reductions and enhanced health, safety, and energy conservation characteristics. Additionally, this program develops production processes incorporating the latest state-of-the-art technology from private industry to mass-produce the new, more sophisticated munitions.

We believe that we have a balanced program and solicit your support in this budget.

General SKIBBIE. I do appreciate the opportunity to talk to you about the fiscal year 1983 budget request. In total, there are 132 different items in the Army's ammunition budget request, and perhaps the only reason that this appropriation has not been subject to authorization before is the multiplicity of items.

Notwithstanding the multiplicity of items, I would hope that you understand that these items interact in a variety of ways. For instance, we budget separately for projectiles, for fuzes, and for propelling charges because they can be used with various types of projectiles and fuzes. Yet, to have a complete round of ammunition and have it function properly, it is necessary for all three of those items to come together. This is true throughout the ammunition appropriation as well as the other procurement, Army appropriation which I will talk to you about tomorrow.

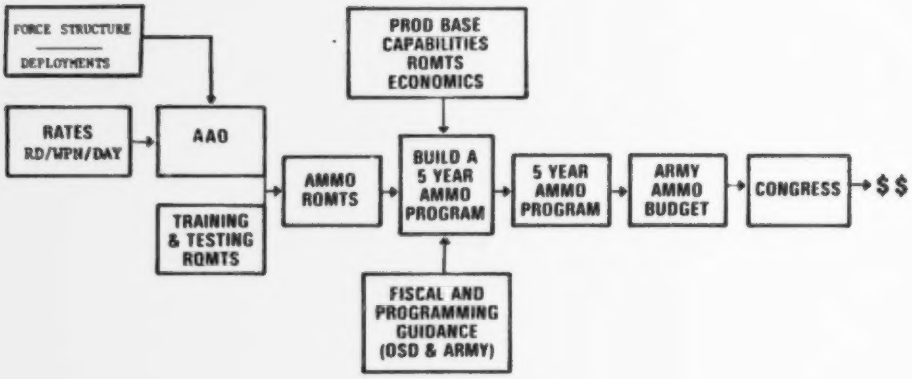
THE AMMO ADAGE

A soldier can survive forever without mail; for 30 days without food; for 3 days without water; for 3 minutes without air.

But not 1 second without ammunition.

So, what I wanted to do was to just emphasize that ammunition is really necessary for readiness. A soldier can live without a lot of things but he cannot live without ammunition for one second.

PROGRAM DEVELOPMENT PROCESS


FORCE STRUCTURE
DEPLOYMENTS
RATES RD/WPN/DAY
AAO
TRAINING & TESTING RQMTS
AMMO RQMTS
PROD BASE CAPABILITIES RQMTS ECONOMICS
BUILD A 5 YEAR AMMO PROGRAM
FISCAL AND PROGRAMMING GUIDANCE (OSD & ARMY)
5 YEAR AMMO PROGRAM
ARMY AMMO BUDGET
CONGRESS
$$

REQUIREMENTS ➡ PROGRAM ➡ BUDGET ➡ $$

I wanted to talk briefly about how we developed our program. We start out with the calculation of rates, and this is a very pre-

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cise, exacting, computer simulation, one-on-one, one at a time against one battalion.

We simulated each weapon and each target, as well as met the degree of visibility, the type of combat, whether it is offense or defense, and then we repeat this with changing various trends. Out of this, then, we get a good indication of what each type of weapon uses in terms of rounds in each day of combat, and also as a function of the day of combat—whether it is the 1st day or the 10th day of the 20th day, because the intensity of combat varies with time.

We then extrapolate that to a theaterwide computer simulation and end up with a calculation of rounds required for each weapon for each day.

We then combine that with the force structure which tells us how many of each type of weapon we have in the theater, how those weapons are deployed, when they begin combat, and that gives us an acquisition objective.

We can plan rather precisely what our testing requirements are for testing future weapon systems as well as how many rounds are required to maintain our training proficiency. This gives us a total ammunition requirement which we then match with the capabilities of the production base.

Now, the production base has a variety of aspects that we want to consider—minimum production rate, maximum production rate, economic production rate, as well as a level of work loading to maintain a level production status and not have any economic disruptions in various localities.

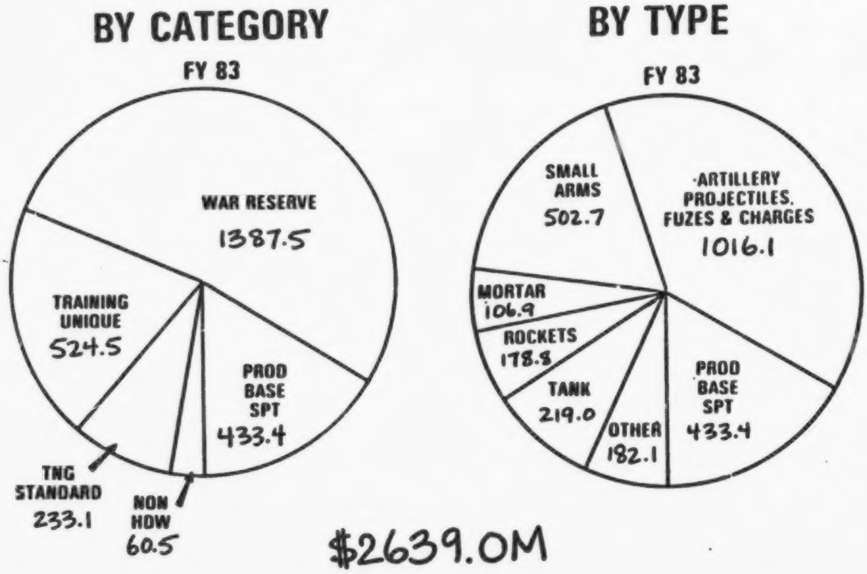
We then use that with the ammunition requirements to build an unconstrained 5-year ammunition program. We then apply constraints in the form of fiscal and programing guidance from Defense.

The programing guidance involves how many days of ammunition we will buy for; the fiscal guidance provides us with the money which we will have to plan on using for that particular type of appropriation.

When we get to the closed session I will talk about the specific number of days that we plan for and program for.

This, then, gives us the constrained ammunition budget which you now have before you. So that you can see by the time we get to this point, the budget has really progressed down a rather tortuous, precise, and exacting path.

PROCUREMENT OF AMMUNITION, ARMY PROGRAMS



Now, that path evolved into this budget for this year. We look at it by category, how much of the $2.6 billion we are requesting is going into war reserve, and how much into training. There are two types of training, training-unique rounds, those rounds that are designed specifically for training and cannot be used for war reserves; and the rounds that are standard rounds planned to be used in training. About 29 percent of this total program is for training. A little over 53 percent is for war reserves, and about 16 percent is for production base support.

The nonhardware portion, about 4 percent, comprises those items such as components for prove-out, components for renovation of field stock, and spares and repair parts.

Now we look at that same program, the $2.6 billion request, by type of ammunition. You can see that about 44 percent is involved in the main casualty producer on the battlefield, artillery projectiles, charges, and fuzes. We have about 19 percent in small arms; about 7 percent in rockets, tank and mortar ammunition, and other types of items; that is again about 16 percent for production base support. I will break this out a little more later.

FISCAL YEAR 1983 AMMUNITION PROCUREMENT PROGRAM

[High dollar items (top 60 percent)]

Item	Quantity	Millions
155mm ICM (DP)	428,000	$237.3
155mm Copperhead	7,600	183.6
Viper	86,000	107.4
8-inch ICM (DP)	88,000	104.2

FISCAL YEAR 1983 AMMUNITION PROCUREMENT PROGRAM—Continued

[High dollar items (top 60 percent)]

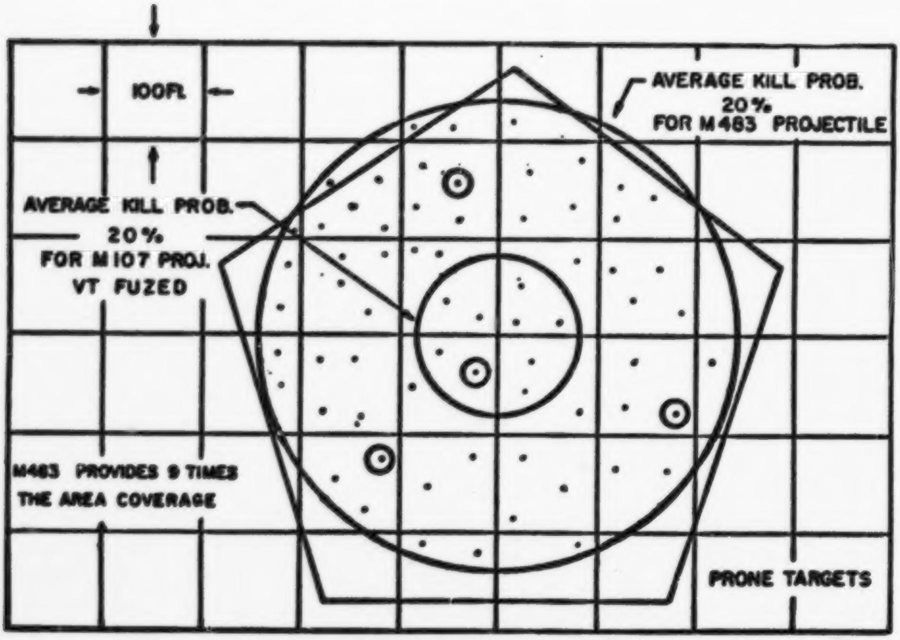
Item	Quantity	Millions
155mm RAAMS (M714, M718)	58,000	98.6
105mm tank DS–TP	397,000	85.5
105mm tank APFSDS–T	96,000	69.3
155mm ADAM (M73, M692)	14,000	57.9
30mm HE–DP	1,374,000	55.1
105mm tank TP–T	282,000	53.3
Fuze, mech time (M577)	680,000	51.4
40mm HE (Divad)	95,000	51.4
25mm TP–T (Bushmaster)	1,534,000	51.3
Fuze, prox	657,000	47.2
155mm, prop chg, GB	699,000	45.3
8-inch RAP	28,000	44.9

Now, as I mentioned, there are a multiplicity of items, 132, I think I mentioned. However, we can quickly aggregate the major drivers of those 132. It displays 16 items here and that represents 60 percent of the request for hardware—by hardware we are really saying bullets or projectiles or fuzes; some component or an end-item of ammunition.

Now, as we go down this chart—and I relate it from the largest resource to the smallest resource—you are going to see a large number of similarities here—each one of those 155mm projectiles uses this 155mm prop charge. Each one of those 155mm projectiles also uses one of these fuzes.

The 8-inch round also uses one of these fuzes, and so we combined those types of fuzes for economy of scale so that when we buy proximity fuzes we are buying all the proximity fuzes we need for 8-inch, or 155mm, or whatever other round of ammunition.

Now, modernization has also come to the ammunition business as it has to the other aspects of welfare. If we look at this entire array, I would say that 90 percent of those resources are for either a specific modernized item of ammunition or in support of a modernized item of ammunition. In fact, the only two that could not be considered modernized would be these two training items, the tank training rounds; all the rest could be considered a modernized item of ammunition.


100Ft.
AVERAGE KILL PROB.
20%
FOR M483 PROJECTILE
AVERAGE KILL PROB.
20%
FOR M107 PROJ.
VT FUZED
M483 PROVIDES 9 TIMES
THE AREA COVERAGE
PRONE TARGETS

PENTAGON INNER COURT

Now, I think the immediate question that comes to mind is what this modernized ammunition gets you. It does truly get you more "bang for a buck." This is a good example of that.

This is for the first item on the previous chart, the M483 improved conventional munition. This circle here—first of all, this outline here is the Pentagon inner court chart, the open area in the center. This is the area in which a conventional 155mm round, the M-107, would have a probability of kill of 20 percent for prone targets in that area.

For the M483, the improved conventional munition, we have this circular area for probability of kill, this is nine times the area. That improved round is not nine times the cost, actually it is only about three times the cost of the original conventional weapon. That is the type of thing we are getting with our modernized ammunition.

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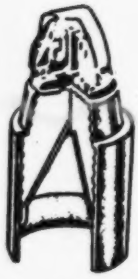
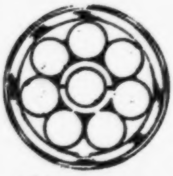
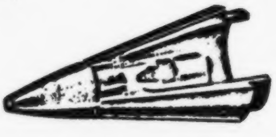
PROJECTILE, 155MM, HE, ICM (DP)



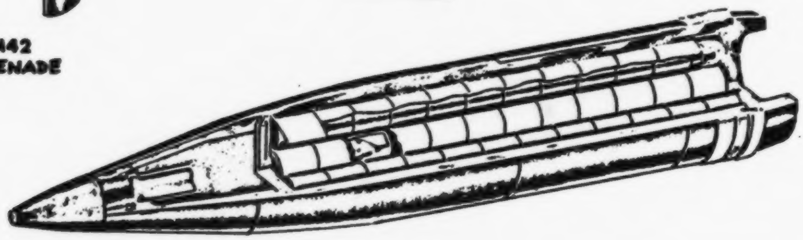
M42 GRENADE



CROSS SECTION OF PAYLOAD



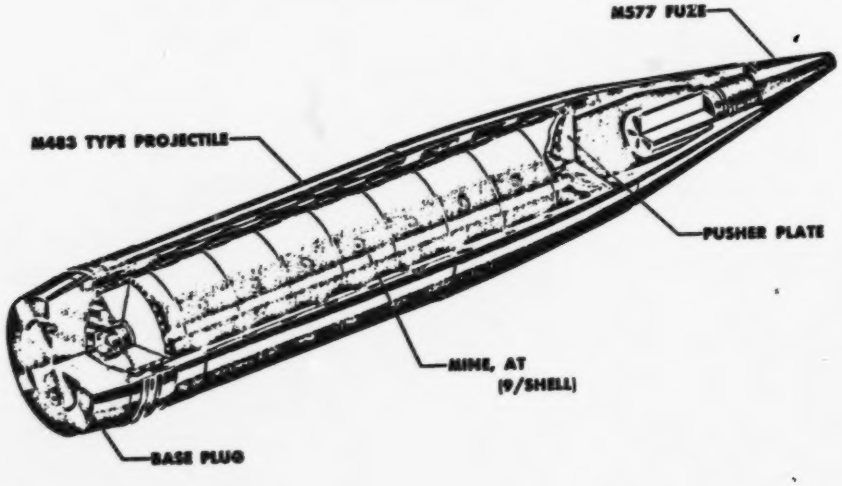
OGIVE WITH SELF REGISTRATION ASSEMBLY



I have a couple of pictures here. This is that round, the 483, it has 88 of these bomblets, it has a common carrier—and that is another interesting thing I ought to mention. This is a family of munitions; they all use the same outer shell and have different internal mechanisms.

In this case we have 88 bomblets. The fuze causes these bombs to be expelled through the rear when it reaches the target, and they spread out and fall to the ground.

PROJECTILE, 155MM, RAAMS


M577 FUZE
M483 TYPE PROJECTILE
PUSHER PLATE
MINE, AT (9/SHELL)
BASE PLUG

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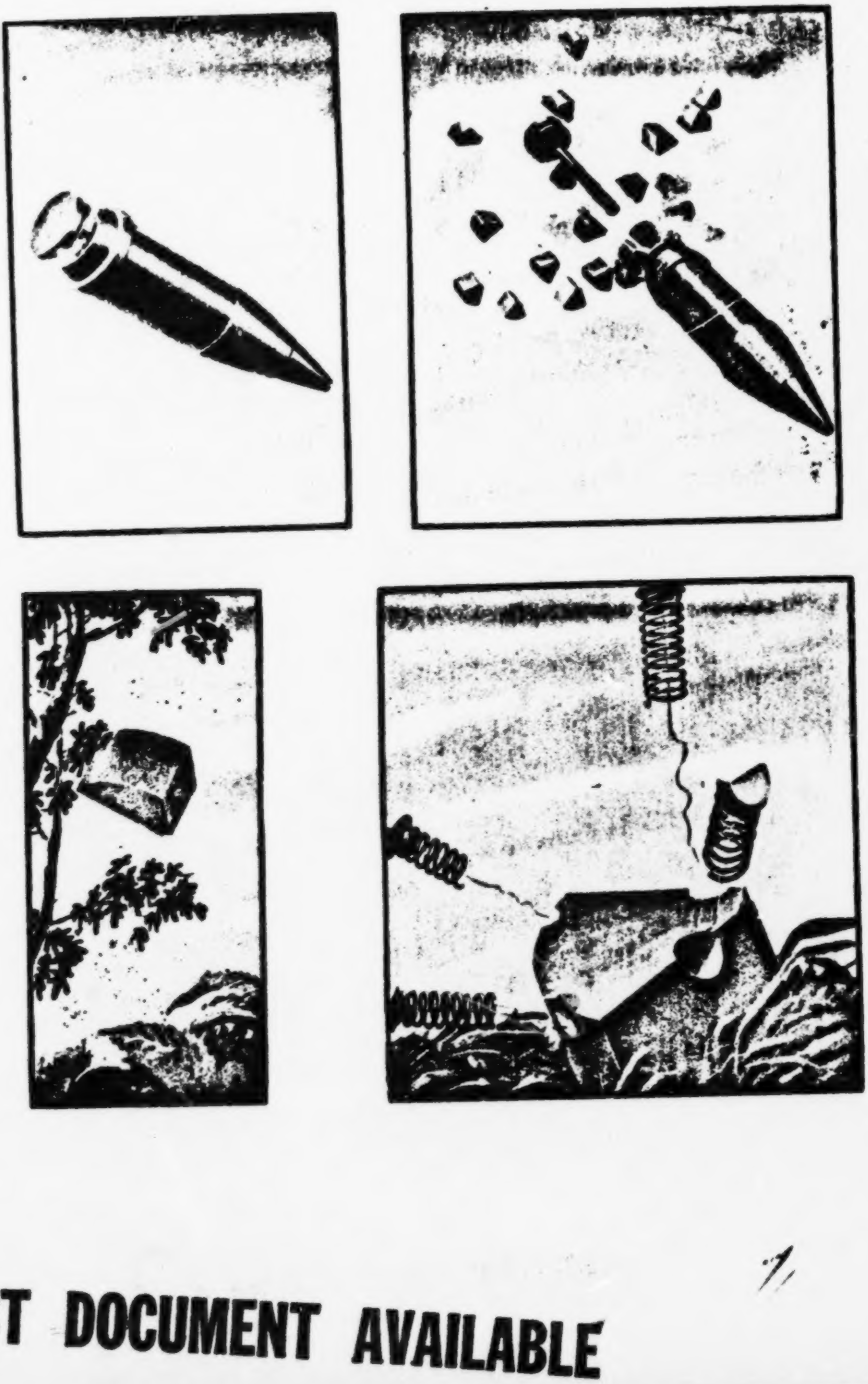
This is the second one of that family. Again, it is the same carrier. This happens to be the Remote Anti-Armor Mine System, and it has nine antitank mines. Again, they are expelled through the rear.

PROJECTILE, 155MM, HE

AREA DENIAL ARTILLERY MUNITION



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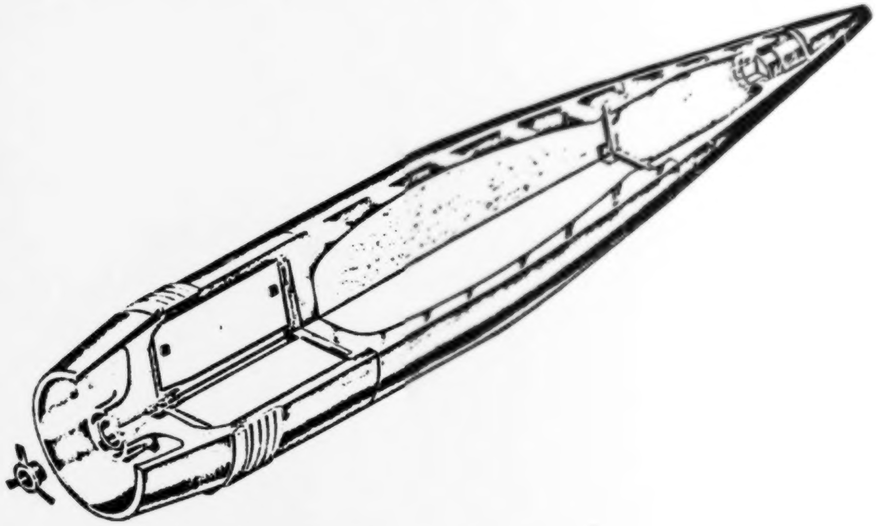
This is the antipersonnel Area Denial Artillery Munition, and again, the same carrier. You have an expulsion charge and it kicks out 36 of these mines which have trip-wires on them.



PROJECTILE, 8 INCH, RAP

Now, getting into the other family of modernized munitions, we have two types of rocket-assisted projectiles. This adds range to our 155mm and 8-inch howitzers. This is the 8-inch shown but it also comes in the 155mm size. This will extend the range of the 8-inch roughly 7 km. So, it would extend its range from 22 to 30 km, and the 155mm has a proportional increase in its range.

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M774 APFSDS
105mm

DESCRIPTION

The M774 is an armor piercing, fin stabilized, discarding sabot projectile. The M774 utilizes a one-piece (monobloc) heavy metal depleted uranium penetrator.

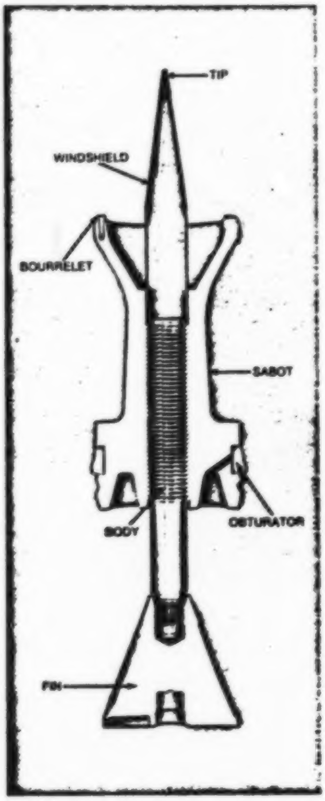
PHYSICAL CHARACTERISTICS

Projectile Length	18.707"
Projectile Weight	12.72 lbs.

PHYSICAL COMPOSITION

The following are the components and the material from which they were derived:

Tip	Steel
Windshield	Aluminum
Bourrelet	Stainless Steel
Sabot	Aluminum
Body / Penetrator	Staballoy
Obturator	Nylon
Fin	Aluminum



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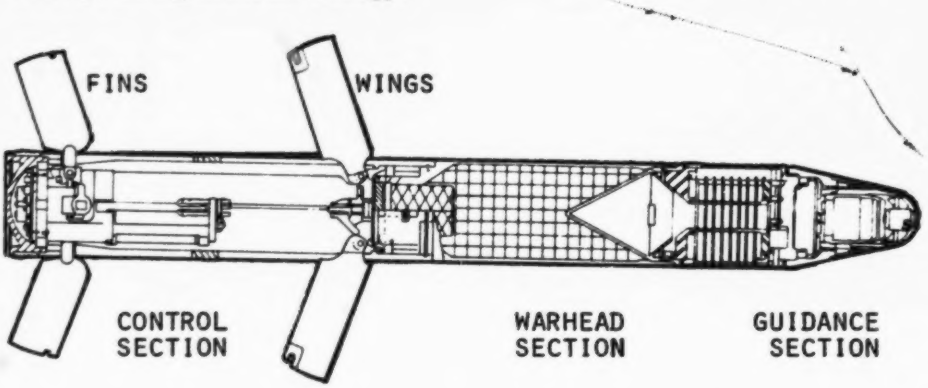
Now, just as we have tank armor of increasing thickness in character and type, we also have the requirement to increase the ability to penetrate that tank armor with improved types of tank ammunition.

This is the current M774. Basically, you have a penetrator here made of a very dense material. This is supported on either side to allow the gases inside the projectile to apply force over a very large area; as soon as it gets outside of the gun tube the Sabot falls off. You are going to have the projectile continuing on with a very high velocity, using kenetic energy.



COPPERHEAD

As the next to the last we have the Copperhead which really opens a new era for our children. This is a 155mm Copperhead laser-guided munition.

We in effect are firing a guided missile out of a cannon. It undergoes 7,700 G's of acceleration. You can imagine the type of hardening we have to have on the guidance mechanism. Then with a separate device, in this case a ground-located laser designator, we can lase on a target. When the projectile comes into the vicinity it surges toward the reflected laser energy, sees the laser energy, and homes in on the target.

This is the first time we have really had a capability to attack moving targets with conventional artillery. Of course, as I mentioned, it is 155mm in size and three quarters of our artillery weapons are 155mm. So, that is a tremendous capability for the artillery.

Now, this is just one type of laser designator. We will have a laser designator in the Apache Helicopter; we will have a laser designator in various other helicopters as well as on the fire support team vehicle, and we expect to put one on the remote vehicle, which is a remote Drone.

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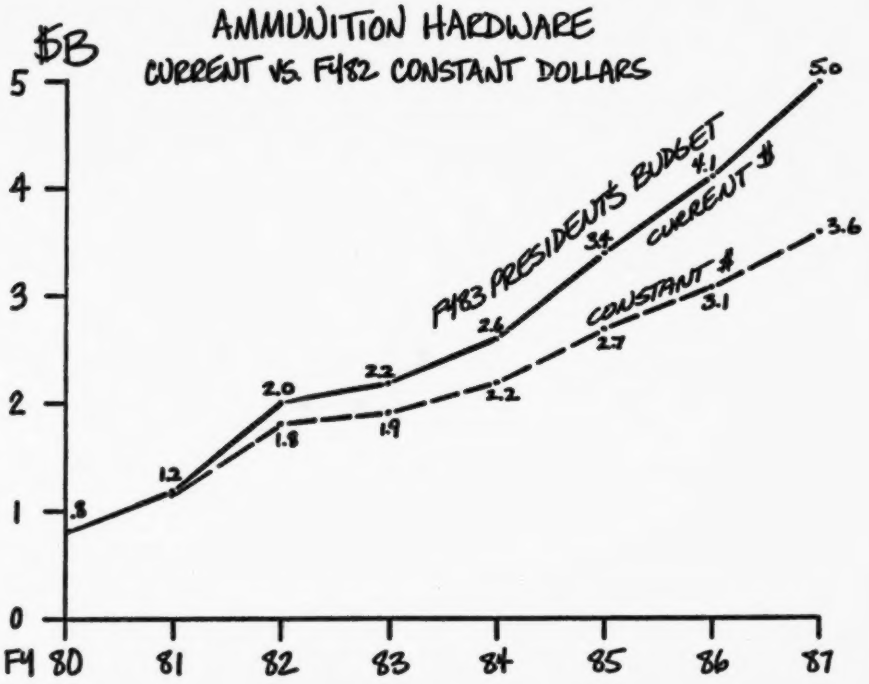
The Viper is a light antitank weapon. It has been controversial. It replaces the M72 LAW which has been in the field since before Vietnam. Its capabilities are three to five times the capability of the M72 LAW, and it has twice the effective range.

The technical problems that we have had with the Viper have been solved. We are working on getting the cost down with a cost-reduction program that started last year and should be going into effect in this year's production.



Now, I skipped over three slides which are classified and we will have them in executive session. But, in effect, they tell you where we are with this budget in terms of days of sustainability. In effect, how long can we fight with the ammunition which we have now; how long will we be able to fight with the ammunition which this budget gives us? I would like to reserve those for executive session.

As I mentioned, this budget will give us a modest enhancement in days of sustainability. That is predicated upon this level of funding. Here you see the profile for the President's budget, and here you see the same profile expressed in constant dollars. As you can see, there is a good, healthy rise as we proceed out to the year 1987 to attain our target days of sustainability which have been given to us by the Secretary of Defense.

I would like to just briefly mention the production base support program. Our ammunition is made in a combination of facilities. We have 92 different contractor-owned, contractor-operated plants that are making components or in which we have Army equip-

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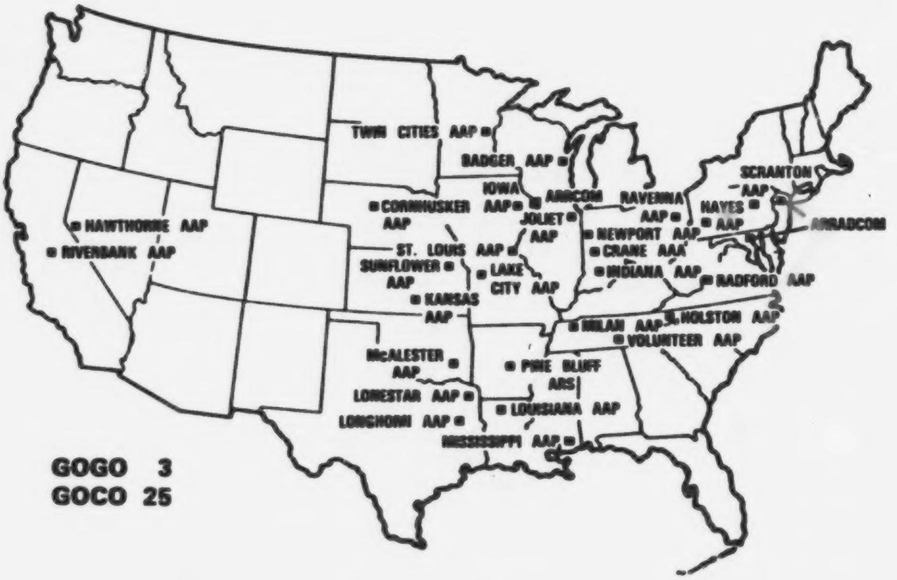
ment. That would just be the first tier, that would not include the second-tier subcontractors. We have three Government-owned, Government-operated facilities, and 25 Government-owned, contractor-operated facilities which are leased out to private contractors who operate the plants.

Of these 28 plants that are Government-owned, exactly half of them are in operation now, the other half are laid away.

Now, there is a determined effort to modernize these plants because most of them were built at the start of World War II with World War I technology. Over the period 1970 to 1982 we have devoted about $2.3 billion to expanding their production capabilities, so that they can build the modernized munitions, bringing them into compliance with OSHA and EPA regulations, and otherwise modernizing them.

DOD CONVENTIONAL AMMUNITION PRODUCTION BASE GOVERNMENT OWNED FACILITY LOCATIONS


TWIN CITIES AAP
BADGER AAP
IOWA AAP
ARRCOM
RAVENNA AAP
SCRANTON AAP
HAYES AAP
ARRADCOM
CORNHUSKER AAP
JOLIET AAP
NEWPORT AAP
HAWTHORNE AAP
RIVERBANK AAP
ST. LOUIS AAP
CRANE AAA
SUNFLOWER AAP
LAKE CITY AAP
INDIANA AAP
RADFORD AAP
KANSAS AAP
HOLSTON AAP
MILAN AAP
VOLUNTEER AAP
McALESTER AAP
PINE BLUFF ARS
LONESTAR AAP
LOUISIANA AAP
LONGHORN AAP
MISSISSIPPI AAP
GOGO 3
GOCO 25

The Government-owned plants are spread from coast to coast but they do have a center over in the eastern two-thirds of the country. Those are just the Government-owned, contractor-operated, or Government-operated facilities.

The Holston Ammunition Plant will give you an idea of what we are talking about when we talk about a government-owned plant. The Holston Ammunition Plant is located at Kingsport, Tenn., and operated by Eastman Kodak Corp. It is the only RDX/HMX plant, and it produces critical components for both propellants and explosives, not only for ammunition but also for missiles. It has a capac-

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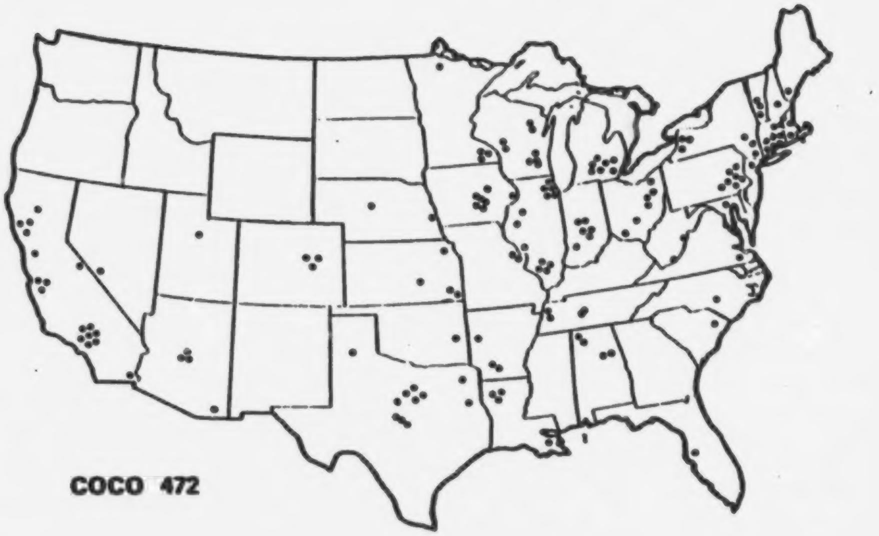
ity of roughly 2½ million tons per month from each one of these lines.

As you can see, it is a very extensive petrochemical facility. To replicate that facility would cost between $900 million and $1 billion.

CONTRACTOR OWNED CONTRACTOR OPERATED PLANTS



Now, the contractor-owned, contractor-operated plants, again, are spread across the country from coast to coast.

SINGLE MANAGER FOR CONVENTIONAL AMMUNITION (SMCA)

Operational in 1977.
Responsible for acquisition of high density conventional ammunition; storage, maintenance, disposal.
Secretary of Army is Single Manager.
Executive Director of Conventional Ammunition: Delegated authorities for SMCA operation; joint service organization; in National Capital region.

I would simply close by pointing out that we have General Burbules with us, he is the Deputy Executive Director for Conventional Ammunition and his is the fulfillment of the Army's mission as the single manager for conventional ammunition.

We became the single manager in 1977, and that gave us responsibility for the acquisition of high-density conventional ammunition as well as its storage, maintenance, and disposal. The Secretary of the Army is the single manager. He has delegated that authority through the Commander of DARCOM to the Executive Director for Conventional Ammunition.

They, then, oversee the operations. It is a joint service organization, jointly staffed by representatives from all services, and it is

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located here in the Washington area. General Burbules will be happy to answer any questions that you might have on that.

Senator HUMPHREY. I want to welcome Senator Levin, the ranking member of the subcommittee. Do you have an opening statement, Senator Levin?

Senator LEVIN. No, I do not.

Senator HUMPHREY. General, there has been criticism of some of these ICMs in the press. Can you give us a little rundown on what the problems were and where we stand in the way of corrections?

General SKIBBIE. We do have a problem with the M483. Let me just use the viewgraph to show you what it is. This is the base plate that screws into the rear. That base plate is blown out as you expel the charges.

The original design called for that base plate to be checked with an electronic device on the outside because the propellant gas is coming from the rear. We did not have any problem, it passed all the tests.

We then tested it to what we call "pin pressure," the maximum pressure it can ever be expected to endure, and we had a malfunction. We had one low-order malfunction and one high-order malfunction—high-order being when the entire thing blows up.

We went through a year-long investigation and found that there had been a change in the manufacturing procedure by the manufacturer—who happened to be Alcoa—for cost-saving reasons. They had changed their manufacturing process. We had agreed to it because our engineers' analyses indicated that it was a good change. Yet, that change in the production process seemed to develop microscopic cracks on the inside which then allowed, in those two examples, hot gases to get inside the projectile and cause it to malfunction.

The solution to that is to check all base plates. When we determined the solution, we immediately changed the production process on the base plates. We have produced 100,000 since that time, and they have all passed. We are now going through the stockpile and are performing an inspection on all the base plates.

We expected to find 3 percent of the base plates having microscopic cracks. We are only finding about 1½ percent. In the interim, we have restricted this round from firing except for combat use. We would not expect to experience the pressures that we simulated in combat because we were overtesting. We heated the propellant charge to 140 degrees which raised the pressure up to in the vicinity of 60,000 to 65,000 psi.

Senator HUMPHREY. So, you are saying that the production problem is overcome.

General SKIBBIE. Yes, sir.

Senator HUMPHREY. It is just a matter of going back through the inventory and replacing that part; is that it?

General SKIBBIE. That is correct.

Senator HUMPHREY. If necessary.

General SKIBBIE. If necessary.

Senator HUMPHREY. What about other ICMs, are there any others that still have a problem?

General SKIBBIE. I do not know of any others that we are having problems with.

General **Burbules**. The M509 is the 8-inch version of the M483A1 that also is loaded with the small grenades. The lesson learned on the M483, of course, is going to be applied to the M509, on which we went into production last year.

The ADAM round also is affected by cracked base plugs. Not the RAAMS round, the Remote Anti-Armor Mine-Scattering System, which has a thicker base plate. However, the ADAM, which scatters the antipersonnel rounds, must also be checked to make sure that there are no cracks in the base plates.

Senator **Humphrey**. General Skibbie, why is the cost of the Copperhead so high? It is $24,000 per round, is that correct?

General **Skibbie**. I would like to explain the $24,000, sir, but I think it is higher than that.

Senator **Humphrey**. Well, the $24,000 is enough.

General **Skibbie**. Sir?

Senator **Humphrey**. We do not want to know that it is more expensive. [Laughter.] Why is it so expensive?

General **Skibbie**. This is the first time we have designed a precision-guided munition to be produced and fired from a cannon, an experience of a 7,700 G environment. It has an electro-optical device, and once it gets into the vicinity of the target, that has to activate its laser sensors; it has to seek out the center of the reflected laser energy, and then it has to command the projectile to home in on that.

So, it is a very precise device. Right now it is going through some cost problems because it has transitioned into production. The first production began in October 1981. We are gradually building up our production rate. We are limited to a production rate of 200 munitions per month until we have a reliability test in July.

The reliability that we are seeing is building up in accordance with what we would predict. We have high hopes that we will get the cost down through a variety of ways.

The best way we expect to get the cost down is to push the producer, the major producer, Martin Marietta, to compete various components which they buy from subcontractors.

Senator **Humphrey**. Second sourcing?

General **Skibbie**. Yes, sir.

Senator **Humphrey**. There is no second sourcing in it?

General **Skibbie**. There is no second sourcing for the major contract because we do not feel there is a sufficient number of total rounds in the buy to make that economical.

Senator **Humphrey**. I understand.

General **Skibbie**. We do feel that it would be economical to push him into second-sourcing and competing on subcomponents.

Senator **Humphrey**. Good, I am glad to hear that. When can we expect to see some results in second sourcing of components?

General **Skibbie**. We are going through a very precise study of that right now. We have a team in the Martin Marietta plant right now to perform what is termed a should cost study. That is, what should it theoretically cost. We expect to use that for leverage on Martin Marietta. We are also holding up signing the 1982 contract until we can get that information.

I would hope that you would see it beginning to be reflected certainly in the 1983 contract, possibly in the 1982 contract.

Senator Humphrey. You mean more efficient production by Martin Marietta?

General Skibbie. Yes, sir, to get over the problems with transitioning from an R. & D.-produced item to a mass-produced item.

Senator Humphrey. That is fine, the proof of all that. But what I was getting at is, when can we expect to see some results in second sourcing the components? You said you are going to push for that. What do you mean by that?

General Skibbie. I would think that fiscal year 1983 would be the first time we expect that. We think they probably already have the subcomponents lined up for fiscal 1982.

Senator Humphrey. Is that solely under their authority, under Martin Marietta's authority whether or not they second source their components? Do you have to resort only to persuasion, or can you force them?

COPPERHEAD PROJECTILE

General Skibbie. I would like to supply that for the record because I think it is a function of the contract. Generally speaking, though, if we are contracting for the entire round we would give the prime contractor that authority in the normal free market economy.

[The information follows:]

However, second sourcing Copperhead components is not up to the prime contractor alone and is being influenced by the Army. With the fiscal year 1981 production program, the Army decided to compete the Copperhead projectile containers and extractors rather than sole-source the contractor. Additionally an Army funded task resulted in a more producible Large Scale Integration Circuit, an electronic component used in Copperhead, which previously was a sole-source procurement. We now expect to have either the contractor or the Army compete this component in fiscal year 1982. Currently, the contractor is competing the production of some Copperhead metal parts in order to achieve contractual deliveries demanded by the Army. Future plans for more competition include the projectile's roll rate sensor and control actuator system. Because of their agreement to negotiate a Firm Fixed Price contract for fiscal year 1982, the contractor has begun a very energetic effort to increase the level of second source competition in order to reduce their costs.

Senator Humphrey. Returning to the question of the expense, what we are looking at is not really an artillery projectile in the classical sense, we are looking at a missile.

General Skibbie. We are looking at a guided missile.

Senator Humphrey. One last question before I turn to Senator Levin. How was the need for this weapon documented?

General Skibbie. Well, we go through a very exacting requirements process with the portion of the Army that we term the user—the soldiers in the field—in terms of what mission he has to accomplish and what tools he needs to accomplish it with.

We then look at his available weaponry and compare it to the threat. In considering the tank threat of the Soviet forces, the Army felt that it needed an ability to use its field artillery in a more precise manner against a moving target, well beyond the range that you can take them under fire with conventional tank rounds or other antitank guided missiles.

This, then, was the genesis for the requirement for a precision guided missile. Out of this came the Copperhead.

Now, if you are referring to the exact number of rounds, that was basically determined by the war games, the computer simulation. Given the capability of the Copperhead, given the scenario that we put that in, the visibility, the weaponry that we had available, the requirement would grow out of that. That computer simulation would be reviewed by a board of general officers—of which I am a member—and then based on that computation of professional judgment and as many facts as we can gather, we determine what the acquisition objective will be.

Senator HUMPHREY. Senator Levin?

Senator LEVIN. Are you satisfied with the reliability of the Copperhead?

General SKIBBIE. Yes, we are satisfied with the reliability of the Copperhead where it is right now in the sense that it is on a growth path that will lead us to the target reliability by July 1982.

Senator LEVIN. So, that is on schedule, the reliability.

General SKIBBIE. Yes.

Senator LEVIN. It is by July 1982.

General SKIBBIE. Yes, sir.

Senator LEVIN. The budget projects $24,000 unit cost for the Copperhead, and you have indicated we are not going to meet that. Why does the budget project that cost if you cannot meet it?

General SKIBBIE. All my data indicates that we are looking at about a $29,000 total program unit cost. Let me have my experts search that out and provide you an answer.

Senator LEVIN. There is quite a difference between $24,000 to $29,000.

General SKIBBIE. In fiscal 1983 dollars I have the average unit procurement cost at $27,000. That is the average procurement cost. The $24,000 is probably the fiscal 1983 program only.

Senator LEVIN. Well, it says fiscal year 1982 unit cost, $24,066.

General SKIBBIE. We are going to have to search that out and give you the answer.

[The information follows:]

COPPERHEAD UNIT COST

The Copperhead unit cost of $24,066 represents the fiscal year 1983 Procurement Unit Cost based on the President's Budget. On the other hand, the unit cost of $29,640 is the Total Program Acquisition Unit Cost. Both numbers are from the Army. The difference between these costs is due to the quantity, dollars, and expanse of time used for computation. The fiscal year 1983 Procurement Unit Cost addresses just the quantity and dollars for fiscal year 1983. However, the Total Program Acquisition Unit Cost is computed based upon the total number of Copperhead projectiles to be bought in the entire program. For Copperhead, it includes all RDTE and PAA funds and the total number of projectiles procured with these funds through fiscal year 1987, the buy out year. It is expressed in fiscal year 1983 constant dollars.

Senator LEVIN. Is the contract that we have with Martin Marietta a competitive contract? Is it negotiated? How did we arrive at the figure?

General SKIBBIE. They were the research and development contractor. It was a cost-plus-incentive fee for fiscal year 1981. We have a fixed-price proposal for fiscal year 1982, and from 1982 on it should be fixed price.

Senator LEVIN. Fixed price.

General **Skibbie**. So, the cost-plus aspect was for the prior year contract as determined by our estimate of the requirement to share risk with the producer. Of course, I think for any item, if we want to pay enough we can get a fixed-price contract. We felt it was in the best interest of the Government to go cost plus and share the risk.

Senator **Levin**. Why do we have to force Martin Marietta to compete on their subcontracts? Why would they have the incentive to do that under your 1981 cost-plus-incentive contract?

General **Skibbie**. Well, I think they will have that incentive certainly under a fixed-price contract. Under a cost-plus contract I think there is a lesser incentive because the fee is the incentive fee. Now, if we incentivize it correctly, if we incentivize it with regard to cost, then they should be motivated to compete their sources there also.

Senator **Levin**. Is not that what a cost-plus-incentive contract is?

General **Skibbie**. Yes, sir.

Senator **Levin**. Why was there not an incentive in 1981 for them to reduce costs if it was a cost-plus-incentive contract?

General **Skibbie**. The only reason I could offer would be that there was not sufficient incentive.

Senator **Levin**. Well, if there is any incentive, why would they not do it?

General **Skibbie**. I guess I cannot answer that. I will have to research that and provide you with an answer for the record.

Senator **Levin**. What we are getting into here, Mr. Chairman, is really to kind of harden the procurement process. I am trying to understand it. We have been very much interested in it and I have trouble with the concepts of some of them, that we have to leverage anything with Martin Marietta. If we have a cost-plus-incentive contract and it is truly one, they ought to have all the incentive—if there is any incentive it ought to be enough to get their cost down. If it is not, I think we would like to know why.

So, if you could please give us that for the record, as to why that is not sufficient incentive for them to compete on their components.

General **Skibbie**. Yes, sir. Certainly, there is more incentive given the fixed-price contract.

[The information follows:]

The prime contractor is working under a Cost Plus Incentive Contract [CPIC] for fiscal year 1980 and fiscal year 1981. As an overrun occurs the contractor is driven to minimum fee. Once he is at minimum fee, there is no additional incentive to reduce costs. For fiscal year 1982, the contractor has submitted a Firm Fixed Price proposal. In this situation the contractor will have the incentive to reduce his cost through productivity improvements and competitive procurement.

Senator **Levin**. I can understand that, but there still should be enough incentive if there is any in a cost-plus incentive contract for them to do so.

Could you also give us the list of their principal subcontractors?

General **Skibbie**. Yes, sir.

[The information follows:]

The principal subcontractors are Chandler Evans, Hartford, Connecticut; Honeywell, Minneapolis, Minnesota; Hamilton Standard, Hartford, Connecticut; Saft Score, Cockeysville, Maryland; Harris, Melbourne, Florida.

Senator **Levin**. Do they make that information available to you? Could we find out from them for instance freely how much they are paying subcontractors for their parts?

General **Skibbie**. On a cost-plus contract their accounts are auditable. So, yes, we could. Once you go to fixed price, that changes.

Senator **Levin**. The delivery of the Copperhead is also a problem, as I understand it. They are behind on deliveries, is that true?

General **Skibbie**. That is correct.

Senator **Levin**. Is there any realistic expectation that we are going to be able to procure all the Copperheads which are budgeted during 1982 and 1983?

General **Skibbie**. Absolutely.

Senator **Levin**. So, you do not have any doubt that the delivery will be on time?

General **Skibbie**. As I mentioned, their initial production came out in October. In the first 2 or 3 months they fell behind. We are now seeing an increase in their production and we feel that they are going to come up to rate very readily now along with the reliability.

Senator **Levin**. They will meet both in time?

General **Skibbie**. Yes, sir. We are limited to 200 rounds per month until we have a reliability test.

Senator **Levin**. Well, at that rate you are not going to be able to buy 7,683, are you?

General **Skibbie**. Yes, sir, because we can start speeding that up once we have the reliability test in July.

Senator **Levin**. The upshot is, you are confident that the reliability tests and the production schedules are such that we are going to be able to buy the budgeted amount with confidence of reliability.

General **Skibbie**. Absolutely.

Senator **Levin**. During the budget year.

General **Skibbie**. Absolutely, that is the economic rate we will be going for.

Senator **Levin**. I want to change the subject a bit to the current state of our ammunition production base in general. Is there a gap between our current ammunition stockage and the length of time it would take to gear up the ammunition production base to sustain a conventional war?

Senator **Levin**. Is the ammunition production base capable of reaching our stockage objective for conventional munitions before the end of the current 5-year defense program?

General **Skibbie**. In general I think it would be, if we wanted to apply the resources and buy the ammunition faster. Yes, it would be.

[Additional information follows:]

Since Vietnam, the Ammunition Production Base has been reduced to its present state which consists of the following:

	Total	Active
Government-owned, contractor-operated plant	25	11
Government-owned, government-operated plant	3	3
Contractor-owned, contractor-operated plant with plant equipment packages	92	27

Since 1970 over $2.2 billion has been invested in the base for modernization and expansion.

The gap between our current days of supply for our war-reserve stocks for ammunition and the length of time required to gear-up the production base to sustain a conventional war is considerable.

The days of supply of stock ranges from [deleted] and the time to reach maximum production ranges between [deleted] for a warm base (items in production) and [deleted] for a cold base.

I think there are other considerations because to do that we might have to start a second shift, for instance, and then we have to also consider what happens once we reach that objective. We do not want to have a situation where we immediately shutoff plants and lay people off work—not that that is the only consideration, but workload is a consideration as we make these programs.

Senator LEVIN. If you had more resources, would you close that gap faster?

General SKIBBIE. Oh, absolutely, sir.

Senator LEVIN. Does a gap still exist at the end of the 5-year defense program?

General SKIBBIE. Yes, sir, that gap still exists—as we referred to earlier, a gap between the days of sustainability and that point at which the production base could begin delivering appreciable amounts.

Senator LEVIN. How do we close that gap? If we reached our sustainability requirements, what could we do?

General SKIBBIE. You raise the sustainability requirement.

Senator LEVIN. Is there any other way to do it besides that?

General SKIBBIE. Well, you can do it in one of two ways. We can raise the sustainability and buy more of a stockpile; or you can have your plants running and producing at a higher rate, or have more plants producing, so that you can quickly accelerate.

The problem with the plants' production rate is that, as you saw, we have half of the plants laid away. So, once a plant is laid away, generally the people get different jobs. We attempt to keep the plant in a maintained condition but it nevertheless takes a certain period of time to open those plants up, attract employees, train the employees and then get the raw materials and begin production. That is the thing that takes such a long time and causes that gap.

So, you get down to the old short-war versus long-war question.

Senator LEVIN. Is the sustainability requirement based in part, to a significant degree, on the length of time it would take us to get those other plants operating; is that a major factor?

General SKIBBIE. The OSD guidance?

Senator LEVIN. Yes, is that a major factor?

General SKIBBIE. No, I do not believe so.

Senator LEVIN. Is it a factor at all?

General SKIBBIE. It is certainly a consideration. But I do not make that guidance and that would be more appropriately answered by the Office of the Secretary of Defense.

Senator LEVIN. I have other questions, but I used a lot of time, so I will yield back.

Senator HUMPHREY. Before I leave the Copperhead issue, General Skibbie, I do not feel satisfied that the cost is going to be brought under control. I will not dwell on it now, but I will ask for a special briefing from your staff on where we are with the Copperhead and where we are going, especially with regard to procurement policy and projected costs, et cetera.

General **Skibbie**. Yes, sir.

Senator **Levin**. Mr. Chairman, are you now going to move from the Copperhead?

Senator **Humphrey**. Yes, do you want to continue?

Senator **Levin**. Could you yield on that subject?

Senator **Humphrey**. Sure.

Senator **Levin**. There was one question on the Copperhead I meant to ask and I failed to, and that is the question of dual source of the Copperhead itself. Are we contemplating that?

General **Skibbie**. For the prime contractor?

Senator **Levin**. Yes, why are we not contemplating that?

General **Skibbie**. Because of the overall quantity of Copperheads which we are buying, we feel that the quantity is not sufficient to make it economical to facilitize a second source and bring him on line.

Senator **Levin**. When will that point be reached under our projected program?

General **Skibbie**. When will we buy out the current program?

Senator **Levin**. When will we buy enough to make a second source a real possibility?

General **Skibbie**. We do not intend to buy that many.

Senator **Levin**. We never intend to?

General **Skibbie**. Our acquisition objective is sufficiently low that we did not feel it was economical to facilitize a second source.

Senator **Levin**. At any point?

General **Skibbie**. At any point.

Senator **Levin**. Thank you, Mr. Chairman.

Senator **Humphrey**. Is the shelf life of the Copperhead a classified figure?

General **Skibbie**. No, it is not.

[Additional information follows:]

COPPERHEAD SHELF LIFE

The Copperhead projectile is designed to maintain its reliability with no degradation for a period of 5 years in an outside storage area and for a period of 10 years when stored in a covered bunker.

Senator **Humphrey**. Right. Is there not some guidance mechanism that might require periodic maintenance or inspection?

General **Skibbie**. No; there is no component of Copperhead that requires periodic maintenance.

Senator **Humphrey**. Again in the area of artillery. What would the 1983 budget provide for tank crews in the way of crew training? Crew training for tank crews, are they going to have a chance to fire more rounds this year, or what is the effect of the 1983 budget?

General **Skibbie**. The 1983 budget as far as tank training rounds increases very slightly over 1982. It is an appreciable increase over 1981.

You should realize that the training ammunition which we are buying in 1983 will really be used for training in 1985.

Senator **Humphrey**. I see.

General **Skibbie**. So, yes, it does provide an increase over 1981, it is about equal with the quantity which we had in 1982. There was a big increase from 1981 to 1982, and we stay level in 1983.

The other type of tank training rounds went down slightly, not appreciably. So, I would say that overall we are about static with 1982, about equal with 1982, and quite a bit better than we were in 1981.

Now, the 1981 ammunition is what is going to be used this year for training. So, the people in the field are still going to look at 1981, that level of ammunition.

Senator **Humphrey**. Is there some point in the future when there is going to be a jump in rounds available for training?

General **Skibbie**. Certainly, next year, in 1984 when the 1982 training ammunition comes off the production line. This is a continuing problem for us, the entire question of training ammunition. We have combined factors, really, of increasing costs for training ammunition, as well as the fact that we have in the past, to some degree used excess ammunition for training.

As a result we have drawn down stocks, so we have not really seen the total training bill in the past. We are now seeing the total training bill. We will, wherever possible, constrain training ammunition. If we can maintain the soldiers' level of expertise with the lower level of training, we are doing it. We are starting a crew-served weapons training study to attempt to quantify exactly how much is enough, how much do you have to fire to maintain or establish proficiency.

We have appointed a Department of the Army inspector for training, Lieutenant General Beckton. One of his prime interests is looking into the training ammunition situation.

I think it is always desirable to train more and raise your proficiency, but it gets to be a question of how much is enough. We are attempting to quantify that now, and we will have better answers in the future.

Senator **Humphrey**. In the whole area of artillery, whether Army or Guard, this 1983 budget will not be effective, it will not be felt for several years; is that correct?

General **Skibbie**. That is correct.

Senator **Humphrey**. I will submit the balance of my questions to you in writing. Senator Levin, do you have further questions of General Skibbie?

Senator **Levin**. I have a question for General Burbules.

General Burbules, General Kroesen testified before this subcommittee that the fiscal year 1983 budget does not meet his requirements for training ammunition. A recent chart that was published in the Army comptroller's overview of the 1983 budget shows that beginning in 1983 there is a widening gap between the Army's training ammunition requirements and the amount of training ammunition that the Army plans to buy.

The shortfall in fiscal year 1983 looks like 20 to 25 percent, and by the next year it gets much bigger. How well documented are those requirements for training ammunition?

General **Skibbie**. Perhaps I could address that, sir.

Senator **Levin**. I will get back to you, General Skibbie.

General Skibbie. General Burbules is responsible for all three services, and I think that is an Army question, if I could.

Senator Levin. All right.

General Skibbie. That is the same question that we are agonizing over in the Army of how much is enough for training. We do not see the number of rounds fired increasing that dramatically except in two instances, the Bushmaster ammunition for the fighting vehicle systems which are now about to enter the inventory: and the blank rounds, for what we term the MILES—that is multiple integrated laser engagement system—which simulates combat very realistically.

So, we see those types of rounds going up in usage in training, but we do not see the numbers of rounds of other types of ammunition increasing.

Therefore, when we analyze it we have to say that the increased resources required for training are a function of two things; the increased costs of some of these training rounds would be one aspect, and the fact that in the past we have been living off of excess inventory. We have now consumed that inventory and we now have to request additional resources because that excess inventory is gone.

Now, to address these things with responsibility, that is why we started this crew-served weapons training study to attempt to quantify how many rounds you have to fire for a tank crew to attain proficiency and to maintain it; and how many rounds you have to fire for an infantryman just simply to retain his proficiency on his M-16, for instance.

The Vice Chief of Staff has a semiannual update on ammunition and one of his chief points of interest is reducing the cost of training ammunition, both the cost of the individual round as well as the total cost of training.

As I mentioned, General Beckton has been appointed the Army inspector for training with that the prime area of interest.

Senator Levin. Well, getting back to my question, how well documented is that chart, are you familiar with the chart?

General Skibbie. Yes, sir, I have it in front of me because I am concerned about it, too. How well documented is it? The requirements are developed by the battalion commanders in the field because they make up their training programs and then they determine what they think their training requirements are.

They then submit that through their chain of command and at each level of the chain of command those requirements are scrubbed to insure that there are not excess requests. It finally gets up to the Department of the Army, and that is what you see aggregated right there.

Senator Levin. Will you stand by that chart?

General Skibbie. I will stand by the fact that there is documentary evidence to back it up. What I cannot quantify is whether that overqualifies or underqualifies the man who fires that many rounds.

Senator Levin. Do you have an opinion as to whether that chart is accurate, personally?

General Skibbie. My personal opinion?

Senator **Levin**. Yes; do you think that chart accurately reflects the requirements?

General **Skibbie**. Absolutely.

Senator **Levin**. As you personally would see them.

General **Skibbie**. As seen by the commander in the field, and as scrubbed by the chains of command through which it is passed.

Senator **Levin**. When you say scrubbed you mean as approved by the chain of command.

General **Skibbie**. Yes; when I say scrubbed I mean he did not just sign off and approve it, they went back and checked, is that realistic to fire *x* number of rounds per tank, and is it realistic to go through those training exercises, are those training exercises needed.

Senator **Levin**. So, this means certified. The word scrubbed the way you use it means certified by the chain of command.

General **Skibbie**. Validated.

Senator **Levin**. Validated.

General **Skibbie**. Yes, sir.

Senator **Levin**. So, there is no reason for us to doubt this requirement.

General **Skibbie**. No, sir.

Senator **Levin**. Can you just put in dollar form for us how large that gap is in fiscal year 1983?

General **Skibbie**. In fiscal year 1983?

Senator **Levin**. What is the shortfall?

General **Skibbie**. In 1983 it looks like it is about $300 to $400 million.

Senator **Levin**. By 1984?

General **Skibbie**. Then it looks like it is over $1 billion.

Senator **Levin**. Have we gotten into the antiarmor cluster munitions program, the ACM program?

General **Skibbie**. I think that is an Air Force program.

Senator **Levin**. That is an Air Force program, all right. I guess that will be presented later on today. I was not sure what was presented before I came.

I have some other questions which I can submit for the record or for executive session.

Senator **Humphrey**. Thank you very much, General Skibbie.

General **Skibbie**. Thank you, sir.

Senator **Humphrey**. The next witness is Brig. Gen. W. G. Carson, Jr., Director of the Marine Corps Material Division.

Good morning, General Carson, you may proceed.

STATEMENT OF BRIG. GEN. W. G. CARSON, JR., DIRECTOR, MATERIEL DIVISION, INSTALLATIONS AND LOGISTICS DEPARTMENT, U.S. MARINE CORPS

General **Carson**. Mr. Chairman, members of the committee, it is a privilege for me to appear before your committee to present the fiscal year 1983 ground ammunition procurement, Marine Corps budget request, and to discuss how we determine our requirements.

With your concurrence, I have a formal statement and will submit it for the record.

Senator **Humphrey**. Fine, we will include it in full following your summary statement.

General **Carson**. Our request for ammunition totals $630.2 million. The fiscal year 1983 request represents a net increase of 100 percent over fiscal year 1982. The fiscal year 1983 request also represents the second year since the early 1970's that we will not consume more ammunition in training than we have procured. This direction continues a welcome change and will help in reducing our large deficiencies in pre-positioned war reserve stocks.

Before I present our budget request in detail, I would like to comment on how the Marine Corps determines its ammunition requirements. The Marine Corps, in keeping with its worldwide force-in-readiness responsibility, is provided specific war reserve programing objectives in the fiscal year 1983 defense guidance.

The programing objective is defined as the inventory level that the Marine Corps should attain by fiscal year 1987. Attainment of these programing objectives would provide sufficient munitions for war reserve stocks and training requirements.

In the back of my summary statement I have charts which I will refer to, sir.

FACTORS IN COMPUTATION OF PWR REQUIREMENTS

Force structure.
Weapons mix.
Duration of combat.
Projected expenditure rates.

The major factors considered in the computation are war reserve requirements:

Force structure, which is derived from tables of organization,

Weapons mix, which is derived from tables of equipment and organization,

Duration of combat, derived from the OSD guidance, and

Projected expenditure rates, which are derived from Marine Corps rates study, revised as appropriate by the ammunition acquisition coordinating group, and then approved at the three-star level by the Deputy Chief of Staff for Plans, Policies and Operations, and the Deputy Chief of Staff for Installations and Logistics.

These factors are applied on an individual basis for the three active Marine Corps MAFS, the 4th Marine Division/Wing Team, and special mission forces and general support forces.

The determination of the ammunition expenditure rates is probably the most complex of the four factors. The rate by which ammunition is expended falls into three categories: threat oriented, level of effort, and special treatment.

Threat-oriented ammunition is that ordnance which is normally used against point targets such as enemy armor, field fortification, and weapons crews. Ammunition expenditures are a function of the enemy targets acquired during a conflict.

Level of effort ammunition is expended according to the number of friendly forces in the scenario, that is, the greater the size of the Marine task force, the higher level of effort ammunition one would anticipate expending.

Special treatment items are those munitions such as mines, mine clearing line charges that do not fit into the other two categories.

Our training requirements are generated by the factors shown on this Chart.

Factors in Computation of Training Ammunition Requirements

Projected annual consumption.
Projected changes in force structure.
Projected changes in weapons mix.
Current and projected training standards.
Training policies (shifts to subcaliber and simulation).

Consumption, which is based on historical and projected data.

Projected changes in the force structure.

Projected changes in the weapons mix.

Current projected training standards, and training policies.

Now, having determined the war reserve training requirements, deficiencies are identified, costed, and validated as to production capability. An acquisition program is then recommended to overcome this deficiency.

Now, what I have just explained, Mr. Chairman, is a brief look at how the Marine Corps determines its requirements.

At this time I would like to present our fiscal year 1983 budget request. The program that I present to you represents a positive step toward achieving the ammunition required for the Marine Corps to meet its commitments and be prepared on the battlefield of the future. We believe it will provide the individual marine, our ultimate weapon, with the equipment he needs to win the battle, wherever it may occur.

GROUND AMMUNITION

[In millions of dollars]

Item	Fiscal year 1982	Fiscal year 1983	Fiscal year 1984
155mm artillery	137.5	396.1	142.1
8-inch artillery	29.5	65.2	26.0
Small arms	44.1	76.5	70.8
25mm	12.0	18.0	9.0
Mortars	18.3	3.6	15.5
Tank	38.0	7.5	22.6
Other	35.1	63.3	59.1
Total	314.5	630.2	345.1

On this chart, I have listed our ammunition breakdown. For fiscal year 1983, 73 percent of our ammunition request is for artillery ammunition. This includes $396.1 million for 155mm ammunition and $65.2 million for 8-inch ammunition. We feel that artillery will provide the bulk of our ground fire support in future conflicts.

Our request includes $76.5 million for small arms. Included here are the modern munitions for the new heavy barrel M-16A1E1 rifle, the squad automatic weapon and the MK19 machine gun; $18 million is also included for 25mm munitions in support of the automatic cannon that is used with the forthcoming light armored vehicles.

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With the remaining $74.4 million, we are requesting $3.6 million for mortars; $7.5 million for tank, and $63.3 million for specialty ammunition and ammunition modernization.

Mr. Chairman, in summary, our request of $630.2 million will allow the Marine Corps to maintain its present combat readiness, increase sustainability, make steady progress toward the Commandant's goal of being prepared for the battlefield of the future.

I solicit your support and approval of our fiscal year 1983 Ammunition budget request. This concludes my summary statement.

[The prepared statement of Gen. W. G. Carson follows:]

PREPARED STATEMENT OF BRIG. GEN. WILLIAM G. CARSON, JR., U.S. MARINE CORPS, DIRECTOR, MATERIEL DIVISION, INSTALLATIONS AND LOGISTICS DEPARTMENT

FISCAL YEAR 1983 GROUND AMMUNITION PROCUREMENT—MARINE CORPS OVERVIEW

Mr. Chairman and members of the committee, I am Brigadier General William G. Carson, Jr., Director, Materiel Division, in the Installations and Logistics Department, Headquarters, U.S. Marine Corps. It is a privilege to appear before you today to present the fiscal year 1983 ground ammunition procurement Marine Corps budget request.

The focus of world attention is no longer limited to continental Europe, rather it is broadening to include the Middle East and has the potential to enlarge beyond that. The need for a potent force-in-readiness capable of global responsiveness requires a Maritime strategy. The Marine Corps provides the forces to fill that requirement. The growth in our Fiscal Year 1983 ground ammunition request reflects the shift in national security policy to a Maritime strategy and is a clear recognition of the role that the Marine Corps plays in the execution of that strategy.

This year our ground ammunition procurement budget request totals $630.2 million, an increase of $315.7 million over last year's approved budget. The fiscal year 1983 amount is broken down by ammunition category and compared to fiscal year 1982 and fiscal year 1984 on Chart 1 below.

GROUND AMMUNITION (CHART 1)

[In millions of dollars]

Item	Fiscal year		
	1982	1983	1984
155mm artillery	137.5	396.1	142.1
8-inch artillery	29.5	65.2	26.0
Tank	38.0	7.5	22.6
Mortar	18.3	3.6	15.5
25mm	12.0	18.0	9.0
Small arms	44.1	76.5	70.8
Other	35.1	63.3	59.1
Total	314.5	630.2	345.1

As noted on Chart 1, the fiscal year 1983 request for ground ammunition is $630.2 million. This year's request marks the second year since the early 1970's, that we will not consume more ammunition in training than we have procured. This direction is positive and continues a welcome change.

Specifically, we are requesting $396.1 and $65.2 million for 155MM and 8 inch artillery ammunition respectively. The large investment in 155MM howitzer ammunition reflects the change over from 105MM Howitzers to 155MM Howitzers in our Direct Support Artillery Battalions. We are requesting $7.5 million for tank ammunition and $3.6 million for mortar ammunition. The $18.0 million we are asking for the 25MM ammunition will be used in support of requirements for Light Armored Vehicle. Our request for $76.5 million for small arms is a sizable increase over last year's request and supports various new small arms weapons in last year's budget and this year's budget request. The balance of our requirements in this activity

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total $63.3 million and is needed for ammunition modernization, linear charges, anti-armor, assault and other essential munition programs.

ARTILLERY AMMUNITION (CHART 2)

[Dollars in millions]

Item	Quantity	Cost
Projectile 8-inch RAP	289	$0.5
Projectile 155 Copperhead	791	20.9
Projectile 155 RAAM	18,712	38.1
Projectile 155 ICM	237,141	131.7
Projectile 8-inch ICM	42,827	53.4
Projectile 155 ADAM	12,711	57.2
Projectile 155 HE	298,909	46.2

Chart 2 is a representative sample of 155MM and 8 inch artillery ammunition we plan to procure in fiscal year 1983. Our procurement is planned to meet a three prong enemy threat. The first of these threats is long range enemy artillery. We counter this with the 8 inch Rocket Assisted Projectiles (RAP). In addition to countering the long range enemy artillery threat, the procurement of the 8 inch RAP will permit the Marine Corps to proceed with the replacement of the 175MM guns.

The second threat is enemy armor. The primary rounds to counter this threat are the 155MM Copperhead and the 155MM Remote Anti-Armor Mine (RAAM) projectile. Copperhead will provide accurate target destruction against stationary and moving targets. The Marine Corps' fiscal year 1983 program will obtain 636 Copperhead projectiles at a cost of $20.9 million. This is considered a vital munition in defeating the armor threat. The RAAM projectiles are designed to provide the capability of rapidly emplacing an effective anti-tank minefield. This munition has been designed to deny area access to the enemy. The self-destruct feature of this round permits area access by friendly troops after an appropriate time has elasped.

The third threat emanates from enemy motorized rifle divisions. The artillery munitions used to counter this threat are 155MM and 8 inch Improved Conventional Munitions (ICM), the 155MM Area Denial Anti-Personnel Munitions (ADAM) and the standard high explosive rounds. In fiscal year 1983, $131.7 million has been budgeted for the 155MM ICM round and $53.4 million to the 8 inch ICM round. This round is designed to deliver a relatively large number of grenades against either personnel or light armor targets. The ADAM projectiles are used to deliver anti-personnel mines fired from a 155MM howitzer. The projectile contains a number of anti-personnel mines that are expelled in flight from the rear of the projectile and armed upon impact. These rounds are effective for area denial but also have a self-destruct mechanism to allow area access by friendly troops after an appropriate time has elapsed. For fiscal year 1983, $57.2 million has been requested.

TANK AND MORTAR AMMUNITION (CHART 3)

[Dollars in millions]

Item	Quantity	Cost
Cartridge 105mm, TK, WP–T	4,159	$1.3
Cartridge 105mm, DS, TP–T	20,961	4.6
Cartridge 105mm, TP–T	7,742	1.6
Cartridge 60mm, HE (LWCMS)	26,195	3.6

In fiscal year 1983 our request for tank ammunition includes one combat type smoke round, the 105MM TK, WP–T, and two type training rounds, the 105MM DS, TP–T and the 105mm TP–T. We are also requesting $3.6 million for 60MM Light Weight Company Mortar ammunition.

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SMALL ARMS AMMUNITION (CHART 4)

[Dollars in millions]

Item	Quantity	Cost
Cartridge 5.56 (all types)	192,008,000	$49.1
Cartridge 40mm, HE, DP	620,690	9.9
Cartridge 25mm (all types)	376,124	18.0

As displayed in Chart 4, the fiscal year 1983 request for these particular small arms munitions are requested to support modernization and replenishment programs. With regard to the 5.56MM ammunition, the requirement exists to procure ammunition in support of the new heavy barreled M16A1E1 rifle, the Squad Automatic Weapon (SAW), and the standard M16 rifle requirements. The request for 40MM HE ammunition is in support of the MK19 machine gun which will be introduced to the Marine Corps inventory in 1983. The MK19 will be utilized throughout the force structure. Fiscal year 1983 is the second year of planned procurement for the 25MM ammunition and it will be used by our Light Armored Vehicles.

OTHER MUNITIONS (CHART 5)

[Dollars in millions]

Item	Quantity	Cost
Linear charge	1,073	$16.3
81mm Rocket (SMAW)	6,658	4.5
Viper	6,815	9.2

The fiscal year 1983 request for linear charges is $16.3 million. The linear charge is used to clear and/or breach enemy mine fields. It is fired from either the LVT7A1 or a trailer-mounted container. The request for the Shoulder Mounted Assault Weapon (SMAW) will provide the Marine Corps with the capability to adequately attack in built up areas. It also provides a "bunker buster" capability. The fiscal year 1983 request for the Viper, an anti-armor munition, is predicated upon the successful acceptance of the Army Viper program and the outcome of the foreign weapon evaluation to be conducted jointly by the Army and the Marine Corps. It will replace the less-effective, inventory-depleted Light Anti-Armor Weapon (LAW).

Training unique items (Chart 6)

Item:	*Millions*
Small arms (all types)	$13.4
Tank	6.2
Other	17.3
Total	36.9

Chart No. 6 is a display of our procurement request for training unique items. In the area of small arms we are requesting such items as 5.56MM and 50 caliber blank ammunition, 25MM practice rounds, as well as 7.62MM sub-caliber ammunition used for Viper training. With regards to tank training munitions, we plan to procure a practice round equivalent to the HEAT round and the practice equivalent to the Armor Piercing Discarding Sabot round. The other requirements include practice linear charges and some practice mines. The procurement of these unique items will allow the Marine Corps to conduct effective combat training, simulating real conditions at a reduced cost

As you may know, Mr. Chairman, the Marine Corps has no ammunition production capabilities of its own and procures all of its ammunition through the Single Manager for Conventional Ammunition. Mr. Chairman and members of the Committee, this concludes the formal statement. I will be pleased to answer questions that the Committee may have regarding the request.

Senator HUMPHREY. Thank you, General Carson.

I am looking at chart 1 and I want to ask you for an explanation of why the 1983 request jumps substantially over the 1982; and then in 1984 you are anticipating dropping back to almost half, 60 percent, something like that.

General **Carson**. The OSD gave the Marine Corps more TOA, and within a balanced program we chose to improve the sustainability posture in 1983.

Senator **Humphrey**. So, is it correct to assume that a one-shot augmentation in 1983 is going to bring you up to where you are pretty comfortable, is that the rationale here?

General **Carson**. No, sir, but it gets us a lot closer. If you give us more TOA in 1984, you might see that figure increase based on production capacity to meet the change.

Senator **Humphrey**. I would not be surprised to see that 1984 figure increase.

General **Carson**. This 1983 increase moves us a lot closer to where we should be in 1987.

Senator **Humphrey**. All right, I have no further questions for the open session. Thank you for now, General Carson.

The next witness is Brig. Gen. William P. Bowden, Deputy Director of Logistics, Plans and Programs, Deputy Chief of Staff, Logistics and Engineering, Headquarters, U.S. Air Force. General, good morning.

STATEMENT OF BRIG. GEN. WILLIAM P. BOWDEN, DEPUTY DIRECTOR, LOGISTICS PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF/LOGISTICS AND ENGINEERING, HEADQUARTERS, U.S. AIR FORCE

General **Bowden**. I am pleased to present the munitions portion of the Air Force fiscal year 1983 budget.

As you know, we have the other procurement appropriation, and there are four parts of the Air Force other procurement program, munitions is one of them; vehicles is another; we have electronics and telecommunications, and we have other base maintenance and support equipment. This morning I will talk about the munitions.

In addition, your subcommittee asked us for information on telecommunications and other base maintenance equipment, and I do have a prepared statement that I would like to present to cover that portion.

Senator **Humphrey**. All right.

General **Bowden**. I have a prepared statement also on munitions. Briefly, if I could cover the summary verbally and then I have some photos to show you about our munitions program.

Senator **Humphrey**. Fine.

General **Bowden**. Sir, there are three points about the Air Force munitions program, and I think they are responsive to the questions that you had in your opening statement.

No. 1, our program has been in a state of transition and we are moving to more modern munitions. That is the first point that I want to make to you during the slide presentation.

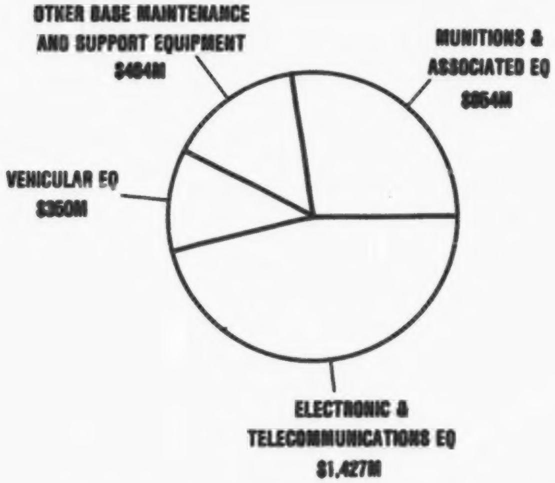
The second point deals with the maturity of our methods for calculating our requirements. We have had a system in existence about 12 years that I am very familiar with, and I have two backup witnesses who have been a part of that.

Over the years I would characterize its maturity in the fact that the major commands have been highly involved in presenting their requirements to us, the kinds of tactics and forces to apply; the kinds of effectiveness of munitions that we ought to be using. So, I think that program is getting scrubbed.

The third point deals with our training. We most certainly have made a major effort to improve our training posture, trying to improve our readiness. We had substantial dollars last year in our training munitions, and this year it is about 30 percent of our $854 million request.

Now, if I could show you those photos, sir.

Senator HUMPHREY. Fine.



FY 83 OTHER PROCUREMENT APPROPRIATION

(WITHOUT SPECIAL PROJECTS)

$3,095 MILLION

General BOWDEN. This chart summarizes what I told you about the other procurement appropriation, it totals about $3 billion. We have another category of special activities—that is in the classified arena—that adds some additional dollars to this.

Munitions is $854 million; other base maintenance support equipment about $460 million; our vehicles, $350 million; and the electronics and telecommunications about $1.4 billion.

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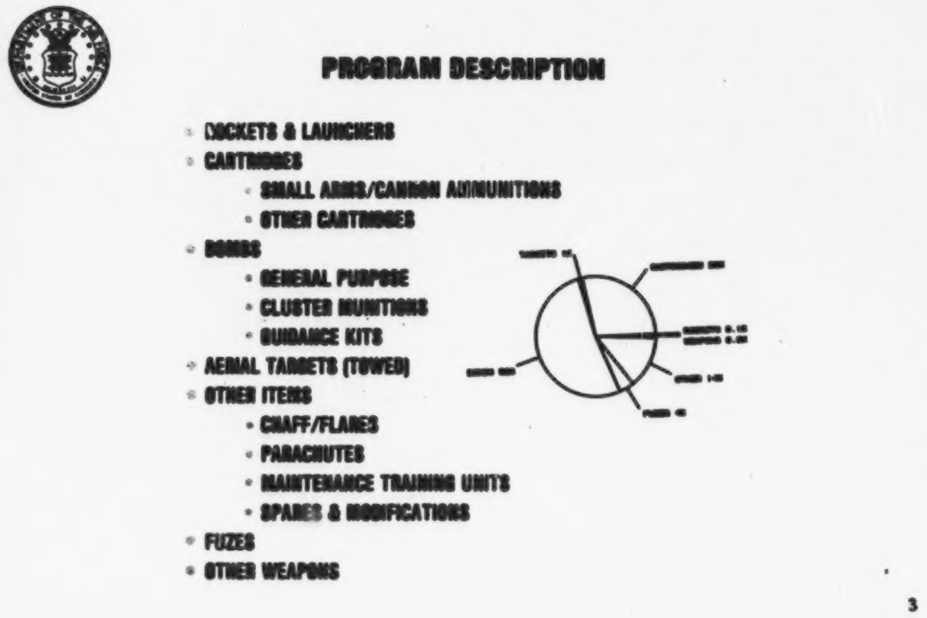

PROGRAM DESCRIPTION

- ROCKETS & LAUNCHERS
- CARTRIDGES
  - SMALL ARMS/CANNON AMMUNITIONS
  - OTHER CARTRIDGES
- BOMBS
  - GENERAL PURPOSE
  - CLUSTER MUNITIONS
  - GUIDANCE KITS
- AERIAL TARGETS (TOWED)
- OTHER ITEMS
  - CHAFF/FLARES
  - PARACHUTES
  - MAINTENANCE TRAINING UNITS
  - SPARES & MODIFICATIONS
- FUZES
- OTHER WEAPONS

3

The categories on this chart make up the munitions program in the fiscal year 1983 budget. The program ranges from rockets and launchers through ammunition for the A-10 gun, 30mm rounds, and the majority of our budget is focused in the bombs area.

We have a number of precision-guided munitions and cluster munitions that we are requesting in the budget. We also have some dollars for tow targets to allow gunnery practice; and then we have some very important components of our war readiness program, chaff and flares as well as other support equipment and modifications.

Fuzes are a very important part of our modernization program. We are moving to more modern fuzes. We have fuzes called M-904, M-905 that we have had around for years and years. It is simply time to modernize and make sure we have reliable bombs.

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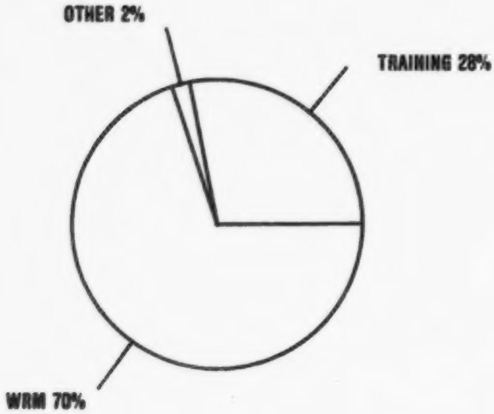
FY 83 MUNITIONS AND ASSOCIATED EQUIPMENT



This chart breaks out for you the $854 million request in fiscal year 1983. About 70 percent for war reserve material and about 28 percent for the training. As I mentioned, last year we made a big effort to increase our training posture, tighten up our requirements computation process, and now this is about the level of dollar request that we will be asking for in future years to keep our sustain training for tactical and other forces.

INPUTS

Threat	Tactics	Methodology
SCENARIO DEFINITION	AIRCRAFT/WEAPON TYPE	ATTRITION METHODOLOGY
CURRENT/PROJECTED THREAT	RELEASE ALTITUDE	JMEM METHODOLOGY
TARGET DESCRIPTIONS/NUMBERS	SLANT RANGE	NCAA METHODOLOGY
DEFENSIVE ARRAYS	DELIVERY MANEUVER	INPUT DATA
DISTANCE TO TARGET	DIVE ANGLE	• JMEM
ENEMY DOCTRINE	AIRSPEED	• TEST
	ENROUTE ALTITUDE	• ANALYTICAL PREDICTION
	EVASIVE MANEUVERS	TARGET SIMULATION
	EXPOSURE TIME	
	RAID SIZE	
	ATTACK COORDINATION	
	REATTACK	
	DEGRADATION FACTORS	

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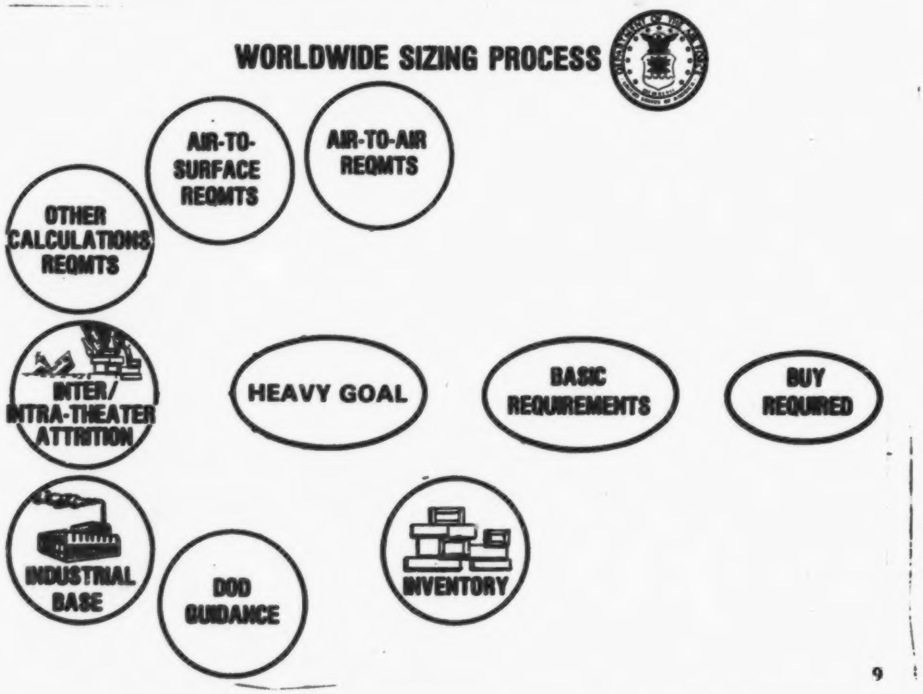
First the way we go about calculating our requirements. We do it based on the threat, the tactics, and the kinds of munitions effective on a target. Simply stated, in the threat arena we look at the kinds of targets that we need to go against, whether we are going against mobile targets—we are talking about tanks, armored personnel carriers; fixed targets—we are talking about supply depots, groups of special deep targets that we might go against.

Of course, we assess what kind of threat we are going to meet, that is, the defensive fire mechanism that the enemy would have. That, in turn, determines the kind of approach that we are going to make to the target. It determines whether or not we are going to use gravity-type bombs; it determines whether or not we are going to use standoff precision guided munitions.

Then we use the category of least cost to kill a target. We figure out how many loads of gravity munitions it would take to go against the target, how many sorties we would have to fly against it, add up the cost.

We then take another weapon, like a precision guided munition and determine how many of those laser-guided bombs would destroy the same target, add up that cost, and simply come up with that which would require the least cost to kill that target. That is how we go about determining weapons mix.


WORLDWIDE SIZING PROCESS
AIR-TO-SURFACE REQMTS
AIR-TO-AIR REQMTS
OTHER CALCULATIONS REQMTS
INTER/INTRA-THEATER ATTRITION
HEAVY GOAL
BASIC REQUIREMENTS
BUY REQUIRED
INDUSTRIAL BASE
DOD GUIDANCE
INVENTORY
9

We are computerized to sum that data. We have a program—here is one of the nicknames of our program, Heavy Goal.

Simply, we add up all of the requirements that we calculate in our munitions programs, year-to-year requirements, the air-to-air and surface-to-air requirements, others, such as the chaff and so

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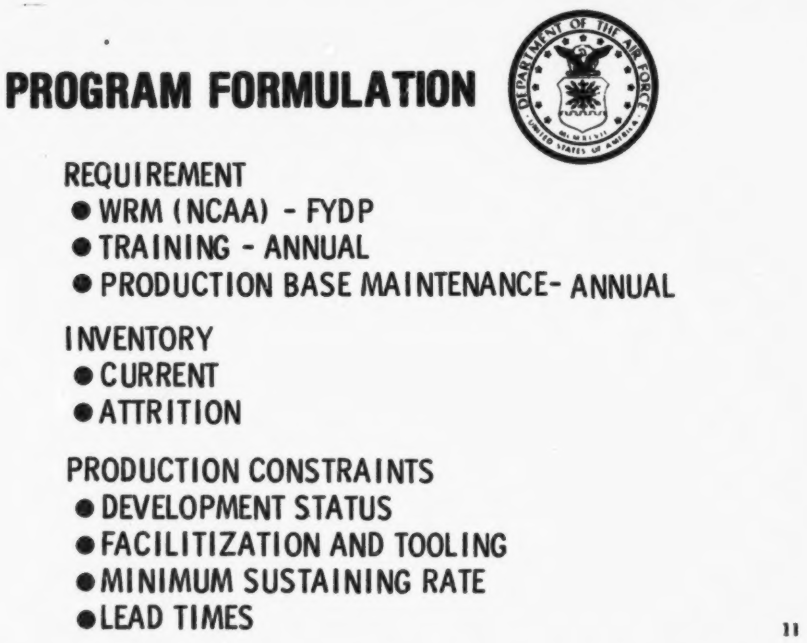
forth. We take a look at the attrition numbers that are involved in our model—how many airplanes we are going to lose; how much is going to be lost as we are moving in from the storage areas to the theater of operations.

We look at what the industrial base is capable of producing, what is ready to be produced, and of course the length of the war that we are stocking for.

Then we come up to the basic requirements, subtract the inventory from it, and come up with our line item programs.



PROGRAM FORMULATION

DEPARTMENT OF THE AIR FORCE • UNITED STATES OF AMERICA

REQUIREMENT
- WRM (NCAA) - FYDP
- TRAINING - ANNUAL
- PRODUCTION BASE MAINTENANCE- ANNUAL

INVENTORY
- CURRENT
- ATTRITION

PRODUCTION CONSTRAINTS
- DEVELOPMENT STATUS
- FACILITIZATION AND TOOLING
- MINIMUM SUSTAINING RATE
- LEAD TIMES

11

This, essentially, is the overall method that I have been talking about, we have our requirements program, the "non-nuclear consumables, annual analysis (NCAA)," and that provides the wartime requirements for the President's budget.

We calculate our training requirements in a very similar fashion to that General Skibbie described to you earlier. Each of the major operating commands determines how many sorties they want their pilots to fly each training period. We look at the munitions available and our inventory. We look at the modernization requirements and the real world situation. In that program we made many improvements over the last couple of years in our training requirements computation.

Of course, the inventory situation plays a big part in how we lay our buy strategy.

Then, production constraints that have been mentioned in previous testimony here, about what is available and how we go about building it.

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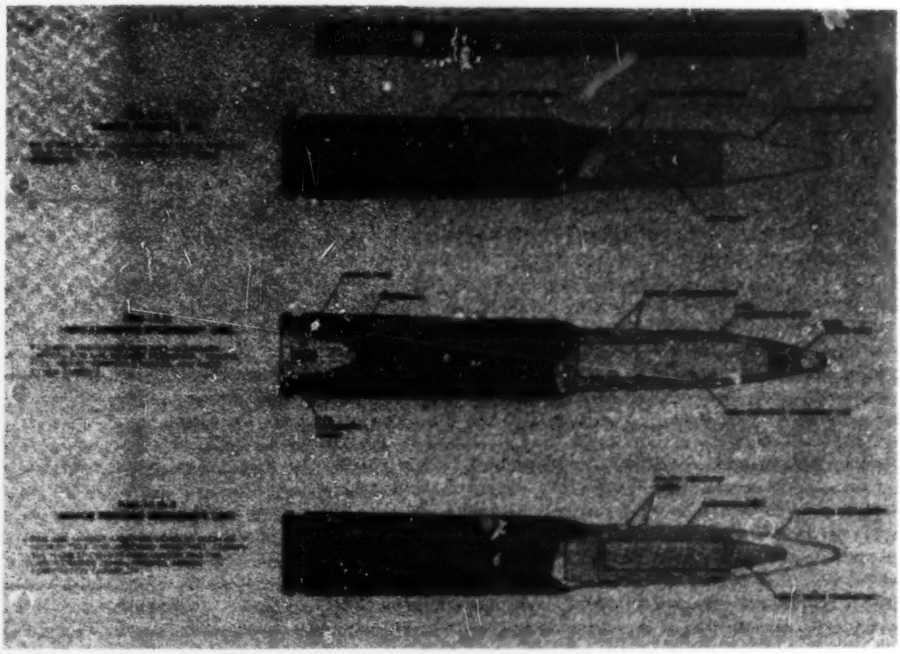

These are some of the munitions that we have on request in our fiscal year 1983 budget. It contains for our A-10 gun program, three kinds of ammo: training rounds, high explosive incendiary rounds, and armor attack ammunition.

Another one is the standby MK82 500-pound munition. This munition is used against a wide variety of targets. It is also capable of being put on a laser-guided kit and you have a precision attack bomb.

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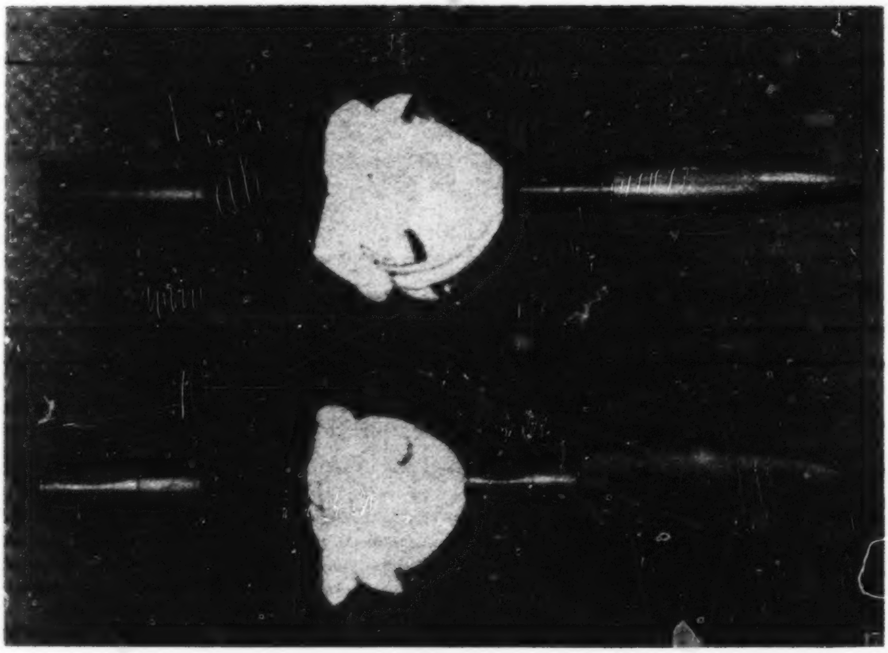

This is the retarder, the new retarder BSU-49, for the 500-pound bomb, and the BSU-50 for the MK84 2,000-pound bomb. This allows a low-altitude attack at high speed. The bag fills with air, slows the bomb down and allows separation between the aircraft and the bomb as it is hitting the target. This is a new, very effective capability that we are putting in our WRN inventory.

This shows essentially how the BSU-49 works. This is a load of 500-pound bombs that is coming out of a B-52 and you can see four of those bomb fins that are inflated.

The laser-guided bomb. We are buying in our fiscal year 1983 program, the low-altitude version of the laser-guided bomb. We are continuing with our laser-guided bomb program that we started a few years back, also. Sir, this is a good test program and these laser-guided bombs worked very well in the tests. We also have some good data for the lasers.

The GBU-15 glide bomb. It is employed on the F-111, the F-4. It is a TV-guided munition, we have a data link. It also goes against precision targets.

The runway buster, airfield attack. It is an example of the kinds of munitions that we need in that category. What happens, a bomb is dropped right over the runway, a parachute is employed. It puts the bomb straight down and a rocket motor fires it right into the runway and we get the cratering effect. We are doing lots of work on this munition and we still have lots of work ahead of us in our program. We need this kind of capability in our inventory.

The ACM cluster munition. It is part of our modernization program. It is a series of bomblets that goes against armored-type vehicles, tanks. It has 48 bomblets. The canister opens up at a prede-

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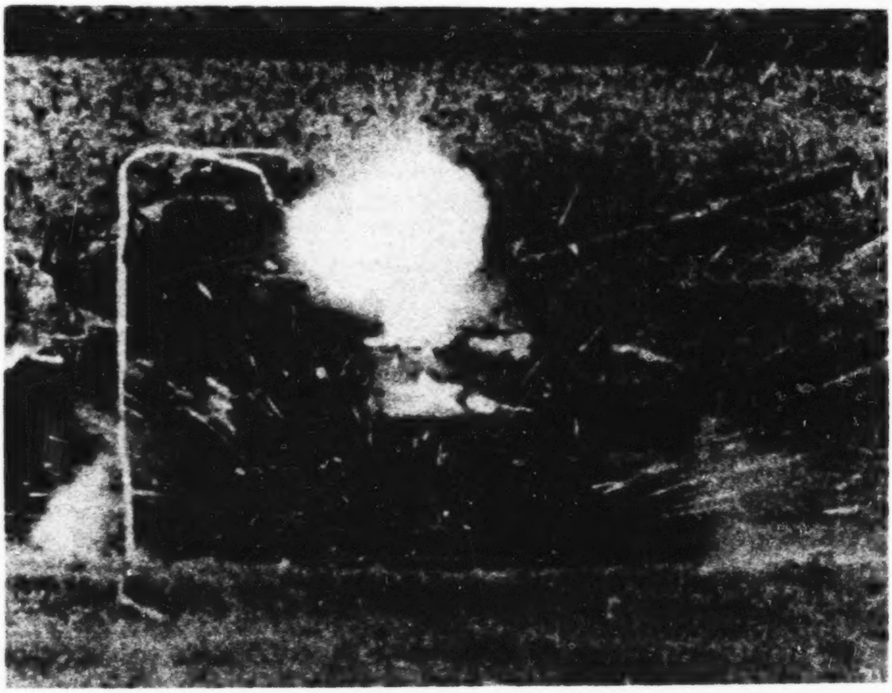
termined altitude. The bomblets come out. Then the sensing mechanism causes the bomblets to go off in the area of attack.

Another new munition is the Gator mine. It works very similar to the munition that I have just described. The canister opens up and the mines come out. Two kinds of mines can be put in this, an armor-penetrating mine. We put 72 of those in to go against tanks; we also put 22 antipersonnel mines in, the trip wires come out to trigger the mine and keep people from coming in to disarm the bomblets. There is also a capability later for them to self-destruct so that our own people can move in.



This is the kind of effectiveness of that Gator munition going against a tank.

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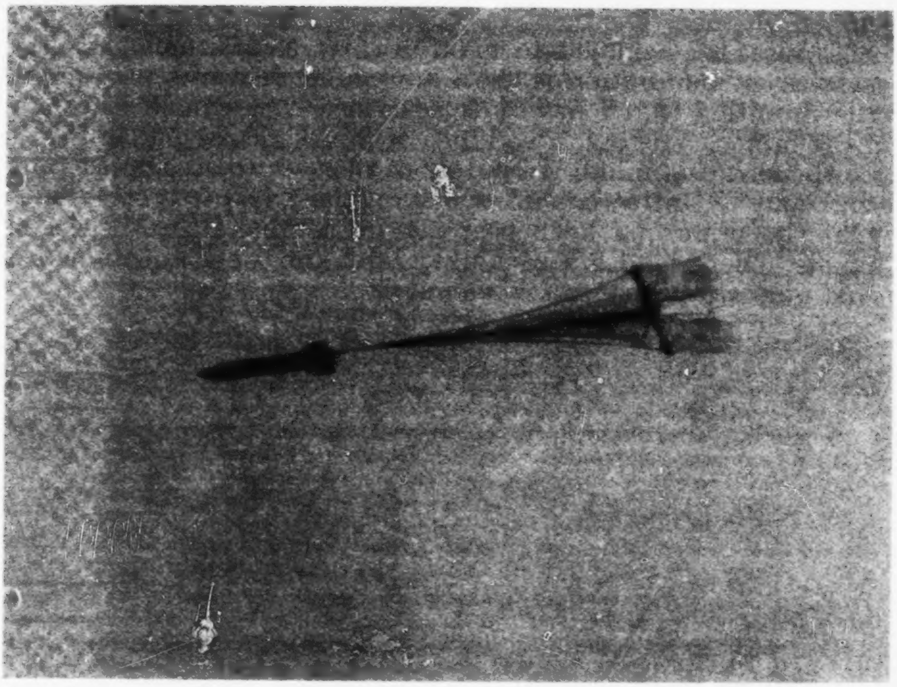

This is a tow target pulled several hundred feet behind an aircraft for air-to-air gunnery practice. There is a mechanism within this tow target that senses how close the rounds came to the target so that we can see how our pilots are doing.

A fuze, a modern fuze, FMU-139. That is part of the program that I mentioned earlier. We must have a modern set of fuzes to go into our munitions to improve the reliability and overcome the age problem that we have with our fuzes.

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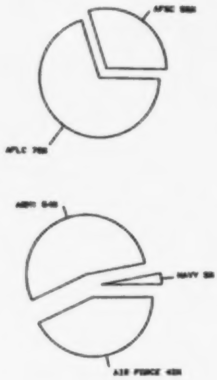
PROCUREMENT ACTIVITY



SYSTEMS COMMAND (AFSC)
  INITIAL PRODUCTION
  INITIAL PROCUREMENT PLANNING
LOGISTICS COMMAND (AFLC)
  SUSTAINING PRODUCTION
  PRODUCTION BASE MAINTENANCE
DOD SINGLE MANAGER FOR CONVENTIONAL AMMUNITION (SMCA)
  US ARMY
  MAJOR SHARE OF PROCUREMENTS
  AWCF (AMMUNITION WORKING CAPITAL (FUND)
DOD SINGLE MANAGER FOR CHAFF
  US NAVY

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My final slide shows the kinds of procurement activities for our Air Force Systems Command people who are early on in the R. & D. and getting the munitions ready for production. Then the management is turned over to the Air Force Logistics Command, and of course we work with the Army and the Navy in the procurement activity.

That completes my slides, sir.

Senator HUMPHREY. Your budget request shows a 15-percent decline from 1982. Then, in 1984 an 80-percent increase. What is the rationale for this?

General BOWDEN. Sir, that gets into the aspect of modernizing our munitions inventory. Last year we bought out our DOD near-term objective, of a number of our munitions.

Meanwhile, in this year's budget we start the production of some of those new munitions that I showed you pictures of. By 1984, when we are back again, we will be talking about increased dollars because those new munitions will start taking effect and we will start the production line in higher quantity.

ANTI-ARMOR CLUSTER MUNITIONS [ACM] PROBLEM

Senator HUMPHREY. What is the problem in the ACM program?

General BOWDEN. Right now, sir, it is a premature situation, is how I would characterize the ACM. In our recent review of the program we had some threat data that showed perhaps the armor-penetrating capability of the submunition needed to be looked at very carefully. But like a lot of programs that are reviewed and come up here, I think we need to sort out what those problems are.

We have not lost confidence in the ACM. We intend to keep pressing on. I think from the review that is currently going on and that is supposed to be over the end of April, we ought to know better what the status of the ACM will be.

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But, the overall philosophy that I have in the testing of new munitions and getting ready for production, just like in the modifications that we were talking about the other day in our depot program, it is the same way with new munitions.

You go through test programs to search out the problems. You run sampling techniques. You get the right kinds of people to solve the problems. So frankly, I am not worried right now about the ACM because I think that the test is good and we certainly will not go into production until it is ready. I think the problems that have been discussed merely warn us to carefully measure where we are right now.

Senator HUMPHREY. Was there a stopwork order issued to the program contractor, development contractor?

General BOWDEN. There was a stopwork order in the R. & D. community until we can resolve the situation. I think that is very proper, very smart thinking.

Senator HUMPHREY. What about the $16 million appropriated in 1982 for long-lead materials for this program, what has become of that?

General BOWDEN. It is still there, sir. It is still there, is still in the program. Right now the stopwork order should not have any effect on that. The review that we have during the month of March would tell us whether or not we need to—if there is a big problem—hold off another year. We will be able to stop that, sir.

Senator HUMPHREY. Well, I would like you to have your staff provide me with a briefing on this program.

General BOWDEN. Yes, sir.

Senator HUMPHREY. This subcommittee is now responsible for this area. I guess we will have to have a closer look at it.

Do you have problems in the fuze area?

General BOWDEN. Sir, we have this problem, the FMU-139 has had some R. & D. problems. That is a Navy-managed program and we work very closely with them.

Last year we thought the FMU-139 would be ready for production and we got all ready for it. Unfortunately, it just was not ready for production. There are signs in this year's program that a similar scenario has developed. Meanwhile, we have to have a fuze. There is a FMU-112 fuze that is available. Like last year, we want to go forward and buy a fuze. We want to do the same thing this year. If the FMU-139 does not pan out, we want to go to the FMU-112. We are serious about buying a new fuze. If the program manager tells us the FMU-139 is ready, we are going to go with it.

Senator HUMPHREY. Well, the FMU-112 would be purchased as an interim fuze, is that the idea?

General BOWDEN. It would be purchased as an interim fuze, but we still have a responsibility to use it in our WRM, it is a good fuze. It costs more than the FMU-139. We would use it up and make the proper kind of economic phaseout.

Senator HUMPHREY. All right. I want to ask you to have your staff include that item in the briefing as well.

General BOWDEN. We will do so, sir.

[The prepared statement of General Bowden follows:]

PREPARED STATEMENT OF BRIG. GEN. WILLIAM P. BOWDEN, DEPUTY DIRECTOR, LOGISTICS PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF/LOGISTICS AND ENGINEERING, HEADQUARTERS, U.S. AIR FORCE

AMMUNITION PROCUREMENT

Mr. Chairman and members of the committee, I am pleased to be here today to present the Air Force's request for Munitions and Associated Equipment for fiscal year 1983.

The Air Force Munitions and Associated Equipment Program includes all munitions and related equipment except for guided missiles. The Munitions Program is one of the four Budget Programs in the Other Procurement, Air Force Appropriation. The fiscal year 1983 request for Munitions and Associated Equipment comprises 15 percent of the appropriation request or 28 percent when the Selected Activities and Special Update programs are excluded. The program encompasses rockets; small arms and aircraft cannon ammunition; bomb ejection and engine starter cartridges; nuclear bomb support equipment; guided and unguided general purpose bombs; anti-armor, anti-material, and anti-personnel cluster munitions; air delivered mines; chemical munitions; explosively ejected chaff; infrared countermeasures and illumination flares; aircraft tow targets; bomb and dispenser fuzes; machine guns and grenade launchers; several types of demolition explosives; and the related specialized test, handling equipment. These items range from small arms ammunition costing pennies a round to complex remotely guided bombs costing over $150,000 each.

All munitions requested in fiscal year 1983 are for the Tactical Air Forces. The remaining one percent of the funding is for support of service-wide equipment previously procured in this appropriation. The majority of the munitions being requested are to build our war reserve material (WRM) stocks. The remainder are for peacetime training of air and ground crews. Over 90 percent of the training munitions funding is for aircrew training items to acquire and maintain combat readiness.

This year's request continues the initiatives begun last year in the fiscal year 1981 Supplemental and fiscal year 1982 Amended Budgets to redress the readiness and sustainability shortfalls that exist today. As defined by the Secretary of Defense and the Chief of Staff in their posture statements, redressing these shortfalls is the second most important priority of the Defense Department and the Air Force.

The requests for training munitions provide for full funding of the aircrew training programs without recourse to drawing from WRM stocks. The reductions from last year's levels of procurements reflect the restoration in fiscal year 1982 of pipeline stock levels and the revamping of training munitions forecasting.

The requests for WRM stocks are required to meet WRM procurement objectives and maintenance of production lines as required by the Defense Guidance.

Our fiscal year 1983 request of $854.2 million is $227 million less than last year's budget. This reduction is due to meeting the short-range WRM procurement objectives set by the Defense Guidance and having restored the pipeline stocks of training munitions. The reductions in these areas more than offset the added funding required to initiate production of new munitions this year. As these new systems transition into full rate production, funding requirements will rise.

The Munitions and Associated Equipment Program is divided into seven major categories as indicated in Table I.

TABLE I.—MUNITIONS AND ASSOCIATED EQUIPMENT

[In millions of dollars]

	Fiscal year		
	1982	1983	1984
Rockets and launchers	1.7	1.9	1.1
Cartridges	480.7	234.3	337.4
Bombs	444.6	440.6	945.4
Targets	13.6	8.4	2.8
Other items	93.6	122.9	130.8
Fuzes	41.9	37.7	105.8
Other weapons	4.8	8.6	12.0
Total	[1] 1,081.0	[1] 854.2	[1] 1,535.4

[1] Totals do not add due to rounding.

I will now discuss each of the seven categories in more detail:

ROCKETS AND LAUNCHERS

The funds requested in this category are for 2.75 inch rocket warheads and meteorological probes. All individual procurements in this category are less than $900,000 each.

CARTRIDGES

The cartridge category is comprised of small arms and aircraft cannon ammunition, grenade cartridges, explosively dispensed chaff cartridges, smoke cartridges, and stores ejection cartridges for aircraft pylons and bomb racks.

Small arms ammunition

The requests for small arms ammunition include 7.62mm blank ammunition for security police training and 5.56mm ammunition for M16 rifle training. The 7.62mm blank ammunition is used in M60 machine guns to provide realistic combat training for security force personnel during their initial training and in annual exercises to maintain their proficiency. The 5.56mm ammunition is used to initially train and annually requalify security forces with their primary weapon.

Aircraft cannon ammunition

Funds to buy aircraft cannon ammunition in 20, 30, and 40mm sizes are being requested for both aircrew training and to meet WRM requirements. The 20mm training ammunition is used in F-4, F-5, F-15, F-16, A-7, AC-130, and B-52 aircraft. The 30mm training and high explosive incendiary ammunition is required for A-10 training while 30mm high explosive incendiary and armor piercing incendiary is needed for war reserve stockpiles to support the A-10 aircraft. High explosive incendiary ammunition is requested to support AC-130 gunship training and war reserve requirements.

Grenade cartridges

Training grenade cartridges (40mm) are required for qualification and recurring training of security force personnel required to man grenade launchers in base defense roles. Grenade cartridges for Mk 19 grenade machine gun and the M203 grenade launcher are requested.

Chaff cartridges

The request for RR-136 and RR-170 chaff cartridges is required to build WRM stocks and a small procurement of RR-170 for peacetime training. The RR-136 cartridge is used in the RF-4C aircraft and the RR-170 is used in the A-7, A-10, AC-130, F-4, F-15, F-16, HH-3, HH-53, and MC-130 aircraft to counter radar directed threats.

Smoke signals

Mk 4 Mod 3 and CXU-3 smoke cartridge are small signals used in BDU-33 and Mk 106 practice bombs to mark the impact point during training missions. The CXU-3 "cold smoke" cartridge is used on target ranges when grass/forest fire potential is high. This cartridge produces a smoke mark nearly equal to the Mk 4 mod 3 without the heat output of the normal cartridge. The Mk 4 Mod 3 cartridge is used for the majority of practice bomb drops where range fire danger is minimal.

Engine starter cartridges

The MXU-4 A/A engine starter cartridges provide engine start capabilities for the A-7, B-52, F-105, F-4, and KC-135 aircraft when ground power units are unavailable or during alert launches. The requested funds will provide for peacetime training and operations. WRM requirements have been filled through previous year's requests.

Impulse cartridges

CCU-43/B and CCU-44/B impulse cartridges are used to eject bombs from bomb racks and to jettison external fuel tanks in emergencies. The CCU-43/B and CCU-44/B cartridges are replacing the ARD 446 and ARD 863 cartridges used previously. The smaller CCU-44/B cartridge is used for light weight external stores drops at low airspeeds, while the CCU-43/B is used for heavy weight stores and high speed aircraft. These cartridges will be used to replace WRM stocks of older ARD 446 and ARD 863 cartridges which will be used for peacetime training.

BOMBS

The largest category of bombs includes general purpose bombs; anti-armor, anti-material, and anti-personnel cluster bombs; air delivered mines; guided bomb kits; practice bombs; chemical bombs; and associated components such as bomb fins and lugs.

Mk 82 and 84 empty bombs

This years budget request includes funds for Mk82 and Mk84 empty bombs for aircrew training. These bombs will be filled with concrete to simulate the weight of explosive weapon and are used to insure aircrews are familiar with the response of their aircraft during actual weapons delivery. They also provide inert bomb bodies for training launches of laser guided bomb kits.

Airfield attack weapon

After testing several foreign weapons for use in the airfield attack role, the French developed Durandal munition was determined to be the best available foreign runway cratering munition. This year's request for a limited procurement of 350 weapons is the first request for procurement of this interim airfield attack weapon. It is a rocket boosted bomb that can be dropped at low altitude and high speed from F-4 and F-111 aircraft. The weapon has been tested by drops from both aircraft. The weapon uses a small parachute to orient the nose of the weapon downward immediately after launch. After the weapon is oriented downward the rocket motor is fired accelerating the explosive charge to a high velocity to penetrate concrete runways. After passing through the runway, the explosive charge is fired which craters the runway. The Durandal weapon will be purchased from the French manufacturer Matra, since the French government will not approve foreign licensing of manufacture.

Air inflatable retarders

The BSU-49 and BSU-50 air inflatable retarders are used to convert 500 and 2,000 pound general purpose bombs to a high drag configuration. These high drag general purpose bombs can be used at low altitudes and at high speeds. The BSU-49 fin is a replacement for the Mk 15 fin for 500 pound bombs, while the BSU-50 fin for the 2,000 pound bomb is a new capability. This year's request is to provide an incremental buildup of WRM stocks and to replace WRM stocks of less effective Mk 15 fins which will be consumed in peacetime training or sold via foreign military sales.

Laser guided bomb kits

Our request for 10,000 laser guided bomb kits includes the initial procurement of the improved laser guided bomb kits that incorporate new design seeker and guidance modules. The improved design allows lower altitude release of the weapon and provides for increased range and accuracy. This redesign extends the original weapon's accuracy into low altitude releases and during poor weather conditions. Two thousand new low level kits will be procured this year.

Both weapons kits are used to convert inventory 500 or 2,000 pound general purpose bombs to precision guided weapons. The majority of the kits are to be procured for WRM stocks with 352 procured for peacetime training. The original design is for use in lower threat areas, in terrain that requires high angle deliveries, and against vertically enveloped targets that do not require the capabilities of the more expensive low level kit. Both weapons use the same laser designators for target tracking. No air or ground based designator systems will require modification.

GBU-15

This year's request for 250 television guided GBU-15 weapons is to provide for a further increment buildup of our WRM stock of this highly capable precision standoff weapon. The GBU-15 is the most capable guided bomb available today. It provides the ability to either acquire the target before or after launch providing unparalleled targeting flexibility. The TV data link, incorporated in the weapon system, allows the aircrew to acquire the target after launch and to update the designated target after release prior to impact. The GBU-15 will be used to attack the most heavily defended high priority targets where other weapons would require tactics that would expose the delivery aircraft to high attrition.

Practice bombs

The BDU-33 and Mk 106 practice bombs are used as low cost simulators for general purpose bombs and nuclear weapons. These small practice bombs simulate the ballistics of the full scale weapons at a fraction of their cost. They can be used on smaller ranges closer to our airfields reducing training costs while providing accurate simulations for assessing aircrew delivery performance and tactics.

Gator mines

This year's request provides for the first low rate initial production of 250 of the CBU-89 version of the Gator mine system. The Gator mines are members of the family of scatterable mines (FASCAM) developed by the Army for use against armor columns. The Gator air delivered mines complement the Army's artillery delivered and mechanically implaced versions which have already entered production. The CBU-89 is a 1000 pound tactical munitions dispenser filled with both anti-tank and anti-personnel mines that produces an air delivered minefield capable of channeling, delaying, disorganizing, or destroying armored columns. The anti-personnel mines are scattered among the anti-tank mines to delay mine clearance. The anti-tank mines are capable of penetrating the belly armor of all modern tanks. The CBU-89 has also been tested as an airbase closure weapon. It proved to at least double the time taken by recovery teams to repair cratered runways and can be used in combination with the Durandal to slow enemy sortie production. The CBU-89 has successfully completed initial operational test and evaluation and has been approved for low rate initial production.

Antiarmor cluster munition

The CBU-90 anti-armor cluster munition (ACM) is a 1,000 pound tactical munitions dispenser filled with 48 ACM submunitions. The dispenser is explosively opened, dispensing the submunitions. The individual submunitions are detonated approximately three feet above ground level and form three self-forging fragments that can penetrate the sides of armored vehicles. The 48 submunitions provide an overlapping pattern of fragments propelled at hypersonic velocities. A fourth self-forging fragment is oriented directly downward to penetrate the top of a tank should it land directly on a target. The request provides for low rate initial production of 2,000 CBU-90s.

AERIAL TOW TARGETS

This category funds the towed targets used in air-to-air gunnery training and air-to-air missile firings. The majority of this year's request is for the advanced aerial target system for gunnery training. This target system comprises a tow pod that is mounted on the aircraft, a streamlined container that is deployed on the end of a tow line, and the target visual augmentor which is a mesh tetraplane attached to the streamlined container and carried inside the container until the container is deployed. The system includes an audio scoring system contained inside the nose of the streamlined container that counts projectiles as they pass near the target. The audio score is transmitted to the tow aircraft by each shooting pass at the target. All portions of the target system are reusable until projectile strikes on the tetraplane or streamlined container are beyond economical repair. Only those parts of the system that are actually damaged need be replaced. This system is replacing the TDU-10 expendable target system.

OTHER ITEMS

This category includes infrared countermeasures and illumination flares, nuclear weapons trainers and parachutes, explosive chaff packages, spares and repair parts, and modifications of inservice equipment.

Infrared countermeasures flares

The RR-119, MJU-2B, MJU-10B and M206 infrared countermeasures flares are used to decoy air-to-air heat seeking missiles away from aircraft. Each flare is designed to mask the heat or infrared signature of the associated aircraft long enough to decoy the missile and cause it to follow the flare rather than the aircraft. The MJU-7B is used with the F-4 and F-16, the MJU-10B with the F-15, and the M206 with the A-7 and A-10 aircraft. All these flares fit in the ALE-40 or 45 modular chaff/flare dispensers fitted to these aircraft. The RR-119 flares are designed for use in the internal chaff and flare dispensers of the F-111 aircraft. All countermeasures flares are being procured for WRM stocks.

Illumination flares

The LUU-4B illumination flare is used by AC-130 and tactical fighter aircraft to provide night time target illumination. This large, parachute retarded flare is being procured for WRM stocks and peacetime training use.

B-83 trainer

This year's request for 46 B-83 training weapons provides the final increment of maintenance, explosive ordinance disposal, and load crew training weapons for this nuclear weapons system.

MC-3468 retard device

The request for MC-3468 parachute retardation devices for the B-83 weapon system provides parachutes and installation hardware for war reserve weapons and for periodic stockpile sampling. The MC-3468 is a large, high performance parachute designed specifically for the B-83 application. The parachute system incorporates explosive deployment and reefing action to provide a specifically tailored trajectory and final impact velocity to the bomb. This trajectory allows the weapon to be released at very low altitudes and high speed while providing stable ballistics and low impact velocity.

RR-141 A/L chaff package

The RR-141 A/L is an explosive chaff package that is mechanically launched from the F-111 chaff/flare launcher. The explosive charge is initiated as the package is ejected from the launcher and after clearing the aircraft explodes the chaff bundle in the airstream. This year's procurement will provide chaff packages for WRM stocks and for peacetime training.

Spares and repair parts

The spare and repair parts requested are for an initial stock of spare parts for weapons, specialized test sets, and handling equipment being requested this year and to replenish spare parts stocks for items procured in prior years.

Modifications

Funds requested for modifications to inservice equipment are primarily required to reduce maintenance costs of older munitions handing equipment by retrofiting more reliable hydraulic systems for over 20 year old systems.

FUZES

The fuze category includes requests for four general purpose and cluster bomb fuzes.

FMU-81

The FMU-81 fuze request is to provide fuzes for inventory laser guided bomb as well as those laser guided bomb kits being requested this year. These fuzes are required to replace older, less reliable, FMU-26 fuzes that are reaching the end of their useful life and to match procurements of new, additional weapons. The FMU-81 is an impact or short delay electronic fuze that can be used for general purpose bomb in low drag or guided bomb applications. No outyear procurements are planned since the FMU-112/139 fuzes will be used to meet all future requirements.

FMU-112/139

The FMU-139 common bomb fuze is a joint service (Navy/Air Force) fuze currently in development. Our fiscal year 1983 request is structured to procure 10,000 FMU-139 fuzes currently scheduled to be available in fiscal year 1983. This 10,000 fuze procurement is a low rate initial production option included in the development contract negotiated by the Navy as lead service. The option will be exercised in January 1983 if the fuze is successful in meeting development milestones. If the FMU-139 fuze development is delayed to the point that the option cannot be awarded in fiscal year 1983, the Air Force intends to procure the FMU-112 fuze to meet critical requirements.

Both the FMU-139 and the FMU-112 fuzes meet the same requirements for an impact or short delay electronic bomb fuze for high and low drag general purpose bombs. The FMU-139 fuze will also meet Navy requirements and is estimated to cost $300 less. The FMU-112 fuze has the single advantage of being in production now, and authority to procure this fuze is requested only as a back-up in case FMU-139 development delays should significantly delay that fuze's production.

This plan is based on two factors, previous Congressional direction not to procure FMU-112 (awaiting availability of the FMU-139) and the need to provide a modern fuze for high drag general purpose bombs and guided weapons. This need has been stated by the Chief of Staff of the Air Force in his testimony to the House Armed Services Committee.

FMU-113/B

The FMU-113/B proximity fuze is a general purpose bomb fuze used to explode bombs immediately above ground level. The proxmity fuzed bomb creates a blast wave and fragments of the bomb case that greatly enhance the effectiveness of general purpose bombs when used against unprotected aircraft, personnel, vehicles, and unreinforced structures. This fuze replaces the impact fuze and fuze extenders. These were previously ineffective in soft terrain and imposed aircraft carriage and delivery limitations.

MK 339 mechanical time fuze

This fuze is requested to provide a low altitude capability for inventory CBU-52, 58, and 71 weapons. The MK 339 is a mechanical time fuze that opens the dispenser at a present interval after the weapon is dropped from the aircraft. It is a less expensive and more reliable alternative to the FMU-26 fuze previously used for this application. Procurement of this fuze is required to match inventories of CBU-52, 58, and 71 anti-material/anti-personnel cluster bombs to be employed using low altitude deliveries.

OTHER WEAPONS

The other weapons category includes handguns, machine guns, and grenade launchers. The items in this category are the only items in the Air Force Other Procurement Appropriation that required authorization in the past. This year's requests reflect the continuation of the program initiated last year to improve the capabilities of our air base defense forces in response to increased terrorist threats and the initiation of the joint service program to replace current handguns with a standardized 9mm pistol.

Airbase ground defense weapons

The 342 M203 40mm grenade launchers, 114 M60 machine guns, and the 161 Mk 19 Mod 3 40mm grenade machine guns provide the high volume and suppressing fire coverage for Air Force security forces defending overseas airbases and nuclear weapons storage facilities. These weapons are part of the overall program to improve the equipment for these airbase defense forces to defend against terrorist attacks or lightly armed military forces likely to threaten rear areas in a general war.

9mm handguns

The 11,500 9mm handguns requested are the first year's planned procurement for the Air Force of the joint service common handgun. The Army is lead service.

The Munitions and Associated Equipment Program is a keystone of the Air Force effort to increase the readiness of our combat forces from the low levels of the recent past and provide for the most rapid, prudent growth of our WRM stockpile to sustain our tactical forces in combat with the modern, effective weapons necessary to meet current and near term future threats to our national security. Without these items, the billions of dollars spent in equipping and maintaining the Air Force will have been largely wasted, since they will have to face an enemy with too few modern munitions and insufficient training to make effective use of their capabilities. The need for ready forces has been clearly stated by the President, Congress, and all senior civilian and military leaders. The requirement for sustaining stocks of modern munitions and the training munitions necessary to develop and maintain the capability to employ these weapons and their delivery systems is paramount to making that ready force. I recognize that many of the items in this request are neither glamorous nor are they all ideal. Each is required to meet the goal, each is a part of the best combination we could find to meet the objective of maximum effectiveness at the minimum cost. None are the ultimate in effectiveness, few are the cheapest possible. They all are compromises to one degree or another. We have spent many months agonizing over the tough decisions necessary. Some say wait for new technology to provide less expensive or more effective answers, others say buy more of what is available today. The program we have presented to you is neither of these extremes; it provides a balance of new technology and maintains the production base for current munitions in the most prudent program we could devise backed by the most rigorous and sophisticated analysis of all the needs that must be met.

Mr. Chairman, this concludes my prepared statement.

Senator HUMPHREY. Thank you, General. We will come back to you during the panel discussion.

We will ask those in the room who do not have a clearance to leave at this time. The subcommittee will go into executive session.

[Whereupon, at 12:25 p.m. the subcommittee recessed to meet in executive session.]

EXECUTIVE SESSION

Senator **Humphrey**. For the record, Colonel Sharp is responsible for security on that side of the room.

Let us begin with opening statements. Do you want to make opening statements in the classified session, General Skibbie?

General **Skibbie**. I do not care to.

Senator **Humphrey**. General Bowden?

General **Bowden**. No, sir.

Senator **Humphrey**. General Carson?

General **Carson**. No, sir.

CHEMICAL MUNITIONS

Senator **Humphrey**. Let us go to chemical munitions, can you give us a summary in that area? Is that your responsibility, General Skibbie?

General **Skibbie**. It is, sir.

Senator **Humphrey**. The Army has sole charge of chemical munitions, is that correct?

General **Skibbie**. We have a production facility which is being equipped to produce the 155mm GB binary munitions. Appropriations were made in fiscal year 1981 for both the construction and the production equipment. We have included in our 1983 budget a request for money to produce [deleted] of the binary rounds.

Senator **Humphrey**. That is the $18,929,000?

General **Skibbie**. It should be, yes. Now, this additional money program in the 1983 request is for further facilitization for a Bigeye bomb production facility. I think that is shown in the slide here.

ACTUAL BINARY MUNITIONS FUNDING

[Dollars in millions]

Fiscal year	Source	Location	Purpose	Cost
1981	Army(MCA)	Pine Bluff Arsenal, Ark.	Construction of 155mm M687 GB production facility.	3.2
1981	Army(PAA-2)	Pine Bluff Arsenal, Ark.	Equipment for 155mm M687 GB production facility.	20.0
1983	Army(MCA)	Pine Bluff Arsenal, Ark.	Construction of Bigeye VX-2 LAP facility	18.3
1983	Army(PAA-2)	Commercial X-facility	QL production facility	10.0
1983	Army(PAA-1)	Various	Production of 155mm M687 GB munitions	([1])

[1] Deleted.

Here you have the two fiscal year 1981 projects, that facilitize for the [deleted] 155mm binary. We have three facility projects for the 1983 program; a military construction project for construction of the Bigeye facility; a commercial facility which produces QL, one of the components of the Bigeye chemical; and additional production equipment for the 155mm binary rounds.

Senator **Humphrey**. That is only in production?

General **Skibbie**. Pardon me?

Senator **Humphrey**. That is only production in the maximum line?

General **Skibbie**. That is correct, that is for the [deleted] and those are the rounds that the President signed the certificate of necessity for in, I believe, February of this year.

Senator **Humphrey**. Where are we going now in 1984, and what are the near-term plans?

General **Skibbie**. In our program for 1984 right now we have an additional [deleted] of the 155mm binary GB. However, we are just in the opening stages of developing the 1984 program.

Senator **Humphrey**. I see. By what year are we supposed to reach our target. What is our target?

General **Skibbie**. Well, the U.S. chemical warfare policy proposes, that we maintain a chemical warfare deterrent or retaliatory capability, and the [deleted]. Currently ready for issue [deleted] of U.S. chemical munitions. [Deleted.] Both those tonnages would be classified secret.

Now, there are additional tonnages which are in a reparable state, but they could not be repaired until 1987. In the meantime there would be additional chemicals that would deteriorate and we would net out at about [deleted]. So, you can see that there is a dramatic shortfall in the JCS minimum, what we call a [deleted].

Senator **Humphrey**. Throughout the 5-year plan.

General **Skibbie**. Well, that says that we should be programing and budgeting for chemical munitions, and of course as I mentioned, we have budgeted for [deleted] of 155mm this year. I would expect that we would continue that plan in 1984.

I would have to defer to the Air Force for whatever their plans are for production.

General **Bowden**. I have the Air Force numbers for the next 5 years, sir. We have no requirements on order for the 1983 program. For 1984, as General Skibbie said about the facilities, we have [deleted] bombs, binary. In 1985 we have [deleted]; in 1986 we have [deleted], and in 1987 we have [deleted]. This does not meet our total inventory objective. We are going beyond that. We are making an effort to modernize this capability.

Senator **Humphrey**. What is the vehicle for it?

General **Bowden**. The tactical fighter force, sir. We put the bombs on our normal triple ejector racks, and when the Ops plan is fully implemented then our normal tactical forces would be qualified to carry these munitions.

NUCLEAR WEAPONS SUPPORT

Senator **Humphrey**. All right. Now can you, General Bowden, give us a summary on the situation in the area of nuclear weapons support. Is that included in your budget?

General **Bowden**. In this particular budget sir, the only nuclear weapons support deals with training devices. There is one training munition that we support in here for training our people, and we do buy some parachutes that go with these nuclear training devices; and there may be a few others.

But the normal nuclear weapons are handled in another account.

Senator **Humphrey**. All right.

General **Bowden**. But we have the specific requirements calculated out for these training devices.

If I might ask Lt. Col. John Frost if he has any additional data that might help.

Colonel **Frost**. Just the training bombs and parachutes. We have a few small items of handling equipment and test equipment to go along with them. They are items in the category of under $900,000.

Senator **Humphrey**. Thank you.

Days of supply, do you have tables or something with you?

General **Skibbie**. I have a chart here on that. [Chart deleted.] What this shows at the top line is basically the combined days of supply, considering both modernized and standard rounds that we have at the end of the delivery period for fiscal year 1982, and progressing on out into 1987.

On the second line we just show the modernized munitions portion, and this should not be considered as additional items, that is subsumed—we should probably have put parentheses around this to indicate that they are not added items.

OSD programing guidance is to program to [deleted]. You see how we progress out to that objective in that table there.

Senator **Humphrey**. So, you are better off in the area of standard weapons.

General **Skibbie**. Pardon?

Senator **Humphrey**. You are better off in the area of standard weapons.

General **Skibbie**. These are combined numbers, [deleted]. We could fight for [deleted] and that would include the modernized munitions. Really, this number is included in that. That does not say that we could just fire for [deleted]. The commander would use more conventional munitions and reserve his improved conventional munitions for priority targets.

But at the bottom line you can fight for [deleted].

Senator **Humphrey**. This is all artillery on this chart, or what?

General **Skibbie**. This is an aggregate and in that sense it is very difficult to get a precise number because each ammunition item is going to vary. Let me have the next chart. [Chart deleted.] Let me just give you an example.

This shows a break-out of different types, 155mm and 8-inch artillery, so you can see that here in [deleted]. So, it varies depending upon what type of munitions you are talking about. But basically, to get that [deleted] we do it on an aggregate tonnage basis and there are several rules of thumb that we use to attempt to aggregate it into a number that gives us a general idea of how ready we are and how much sustainability we have in the program.

Senator **Humphrey**. All right. General Bowden, do you have a briefing for us on your days of supply situation?

PREFERRED MUNITIONS

General **Bowden**. I have one graph that shows two categories [graph deleted] which I call preferred munitions, those are the modern munitions, and then we have the aggregate of all munitions and some of them substantive. This shows the position before the fiscal year 1983 budget. What I am talking about here is the total requirement in thousands of flying hours for all of our tactical forces worldwide.

This line shows flying hours that all those forces fly; and in preferred munitions we are talking about the laser guide bombs, for instance. We are not in very good shape right now, it is about [deleted] or so.

However, the other munitions, the MK82 iron bombs and some of the older cluster munitions, you can see we have roughly about [deleted] percent of our classified requirement here, a [deleted] near term requirement.

Now, if I were to super-impose that $850 million I described, [deleted] percent of that total does apply to our WRM. It brings us out another [deleted] days and brings us up to about [deleted] percent. As each of the 5 years goes along, we put in a total of about $8 billion, then we are at [deleted] days, we would swing this preferred munition line up to this point.

So, we do have an orderly plan and on how we intend to start modernizing. We are in fairly good shape on substitute munitions and we are [deleted] with preferred munitions.

Senator HUMPHREY. General Carson?

General CARSON. I do not have a chart, Mr. Chairman, I do have figures.

[Deleted].

Senator HUMPHREY. What was that abbreviation you used, something-WR?

General CARSON. Pre-positioned war reserve.

Senator HUMPHREY. All right, I think that will take care of it. We will submit questions to you in writing. The record will remain open 15 days.

[The questions, with answers supplied, follow:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. LAWRENCE F. SKIBBIE

ARTILLERY AND TANK CREW TRAINING

Senator HUMPHREY. How does the fiscal year 1983 request improve training for artillery and tank crews?

General SKIBBIE. The fiscal year 1983 request maintains the same level of training as funded in the fiscal year 1982 program. Therefore, there is no improvement.

Senator HUMPHREY. How many training rounds per year per crew will this budget support?

Compare this with fiscal year 1979-82.

General SKIBBIE. The fiscal year 1983 Budget will support 86.4 rounds per artillery and tank crew Army-wide, whereas the fiscal year 1979-82 Budgets provided an average of 70.2 rounds per tube per crew per year.

Senator HUMPHREY. How will this budget affect training for the National Guard?

General SKIBBIE. To answer that question you must first address the total worldwide training requirement vs the ammunition funding level in support of training included in the fiscal year 1983 Budget request.

Due to TOA funding constraints throughout all Army accounts, funds in the fiscal year 1983 Budget request for world-wide training will support approximately 70% of field commands stated needs. Therefore, training requirements will be constrained by approximately 30% for all commands, including National Guard Units.

COPPERHEAD REQUIREMENT

Senator HUMPHREY. How is the Army's requirement for Copperhead derived?

General Skibbie. The requirement for Copperhead derived out of a need to provide a force multiplier that would significantly improve the Army's antitank capability within the existing force structure. Copperhead does satisfy this need with its high single shot probability. It will be used by field artillery units to effectively attack armored targets at ranges beyond the capability of direct fire antitank weapons, such as TOW and Dragon.

Senator Humphrey. What other capabilities and systems is it related to on the battlefield?

General Skibbie. Copperhead integrates into the existing field artillery structure of howitzer and observers. The system utilizes the Ground Laser Locator Designator (GLLD) as its primary designator but can be designated by the Remotely Piloted Vehicle (RPV), the Advanced Attack Helicopter Improvement Program (AHIP), and the USMC's Modular Universal Laser Equipment (MULE).

AMMUNITION PRODUCTION BASE PROVE-OUT

Senator Humphrey. The request contains $22.9 million to prove-out production base modernization. What elements of the ammo request are dependent on prove-out for execution in fiscal year 1983?

General Skibbie. The Army plans to prove-out the following facilities in 1983:

[Dollars in millions]

Location	Facility	Prove-out cost
Radford, Va., AAP	Continuous automated multi base propellant line	$5.4
Mississippi, AAP	155mm M483A1 production complex	9.4
Lake City, Mo., AAP	Small caliber ammunition modernization program equipment	.4
Iowa, AAP	Detonator facility	1.7
Radford, Va., AAP	Continuous automated single-base propellant line	6.0
Total		22.9

The execution of the fiscal year 1983 ammunition request is not dependent on the prove-out of any of these facilities, however, when they are proven-out, it will allow future ammo buys for these items to be produced on modern production facilities which incorporate the latest in production technology and safety.

MALFUNCTION INVESTIGATION

Senator Humphrey. What programs are currently being reviewed in conjunction with malfunction investigations?

General Skibbie. The Army is currently investigating malfunctions involving 89 different ammunition items. The majority of the malfunctions (82) occurred in 1981. The largest number of malfunctioning items (33) are artillery and mortar fuzes. Several small arms cartridges, 81mm and 4.2 inch mortar rounds, and 105mm tank rounds are involved, as well as several hand grenades and hand grenade fuzes.

PRODUCTION BASE SUPPORT

Senator Humphrey. Identify the type, cost and location of major initiatives supported in the request of $392 million for Provision of Industrial Facilities.

General Skibbie. The fiscal year 1983 program provides for the support of the ammunition plants in active production and modernization and expansion of the DOD munition production. This effort was started in 1970 and to date over $2.2 billion has been invested in the ammunition base. Examples of the major initiatives which represents 70 percent of the fiscal year 1983 Provision of Industrial Facilities program are as follows:

[Dollars in millions]

Effort	Location	Cost
Dual purpose production facilities for 105/120mm tank ammunition metal parts.	Various commercial facilities	$83.6
120mm unique tank ammunition production facilities	Iowa, Radford, Va., AAP and commercial.	37.5
Design effort for subsequent year programs	In-House	35.5
Production support and equipment replacement	12 active ammo plants	33.6
Initial and expanded capability for family of scatterable mines (FASCAM)	Iowa AAP	18.9
Seventh phase of construction	Mississippi army ammo plant (AAP)	15.9
Modernize QL production facility (chemical component binary VX bomb)	Commercial	10.0
Additional facilities for 8-inch improved conventional munitions (ICM)	Commercial facilities	8.1
Modernize portions of two fuze manufacturers	Commercial facilities	6.5
Expand antiarmor munitions (Air Force) facilities	Commercial	6.3
Rehabilitate 40-year-old boilers	Milan AAP, Tenn	5.6
Modernize pyrotechnic areas	Several ammo plants	5.5
Additional small caliber facilities	Lake City, AAP, Independence, Mo	4.6
Restore fire damaged acid plant	Sunflower AAP, Kans	4.2
Ammunition containerization facility	Louisiana AAP	3.1
L8A1 red phosphorous smoke grenade facility	Pine Bluff Arsenal, Ark	2.3
2.75-inch rocket grain facility	Radford AAP, Va	1.7

MANUFACTURING TECHNOLOGY COST SAVINGS

Senator HUMPHREY. What cost savings are estimated to result from investment in the Manufacturing Technology Program? What cost saving is assumed in the 1983 budget?

General SKIBBIE. The Manufacturing Technology Program objectives are to develop new manufacturing processes, techniques and equipment for use in production of ammunition. Not all Manufacturing Technology projects have a goal of reduced savings. In fiscal year 1983, 40 percent of ammunition projects have goals of improved safety, better pollution control, or development of a manufacturing process not currently in existence.

Based upon past experience, it is estimated that the fiscal year 1983 Ammunition Manufacturing Technology program will save one dollar for every dollar invested.

Qualitative improvements in safety and pollution abatement cannot readily be measured in dollar savings. It is also extremely difficult to predict what costs would have been incurred had not there been a manufacturing technology project especially in those areas where a manufacturing process was not in existence prior to the project. Another difficulty is assessing savings when technology is disseminated beyond the originally targeted production area.

For those projects completed in the 1970 to 1980 timeframe, it is estimated that approximately $122 million (1980 dollars) will be saved over a given five year production period.

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. PETER G. BURBULES

SINGLE MANAGER FOR CONVENTIONAL AMMUNITION

Senator HUMPHREY. What role did the Single Manager play in developing this request?

General BURBULES. The Single Manager fully participated in the initial formulation of the fiscal year 1983 budget request as it pertained to conventional ammunition procurement/production support furnished by the SMCA. Membership from all the Military Services were represented during the initial formulation process, though the actual budget submissions were the results of independent service final adjustment and decision.

REPORT ON SINGLE MANAGER FOR CONVENTIONAL AMMUNITION

Senator HUMPHREY. Are you aware of a recent House Government Operations Committee report on ammunition management?

General **Burbules**. Yes.

Senator **Humphrey**. What are its conclusions?

General **Burbules**. The following conclusions, findings and recommendations are quoted from the report:

Conclusion

"The idea of centralized management for conventional ammunition is not new. After World War II and the Korean conflict, the idea was discussed but not adopted. During the Vietnam conflict, the need for centralized ammunition management again came to the forefront. During peacetime, ammunition plants were not adequately maintained, resulting in unexpected delays, inefficiency, high cost and unreliability in starting them up. Further, adequate information on ammunition production and inventories was not available. This started a chain of events with numerous studies recommending centralization, which culminated in the decision to establish a Single Manager for Conventional Ammunition in 1975.

"DOD had thought that the Joint Logistics Commanders could bring about the needed improvements. But, in March 1975, DOD advised the services that a single manager would be established because the committee-type management of the Joint Logistics Commanders could not meet the desired objectives.

"The single manager objectives were to integrate conventional ammunition logistics to the maximum extent practicable and achieve the highest effectiveness during peacetime and wartime.

"Implementation was planned to occur in two phases, with Phase I completed in fiscal year 1977 and Phase II in fiscal year 1979. The Army was designated as the single manager and tasked with implementing the centralized management. However, DOD failed to issue a directive requiring implementation of Phase II due to the services' opposition. The November 17, 1981 directive does little more than maintain the status quo, leaving conventional ammunition to be managed on a decentralized basis. The services still maintain almost total control over their ammunition. As a result, ammunition maintenance suffers, and economies in procurement, storage, and transportation are foregone. Most importantly, decentralized ammunition management does not provide the necessary control needed for effective wartime management of these critical assets. As Chairman Brooks noted, the subcommittee will continue to monitor the progress made toward improving the management of conventional ammunition and correcting the accountability and maintenance problems."

Findings

1. DOD has failed to make satisfactory progress toward centralizing ammunition management.
2. Not all conventional ammunition items, even within the Army, are assigned to the single manager for control.
3. The single manager lacks sufficient authority to procure and to distribute conventional ammunition.
4. DOD has not achieved maximum cost savings in procurement, utilization, production, and maintenance of conventional ammunition.
5. The military departments have traditionally resisted centralized management of ammunition for parochial reasons.
6. The military departments do not adequately care for and maintain their conventional ammunition, thus millions are wasted.
7. DOD could save millions of dollars annually by using less expensive packaging for training ammunition.
8. DOD lacks accurate accounting and condition data for its ammunition.

Recommendations

1. The Secretary of Defense should issue a new directive to centralize management of ammunition. The new directive should state that:

a. Except for true research items and inventories in the hands of combat forces, all conventional ammunition inventories should be owned and controlled by the single manager.

b. The single manager for ammunition should be given authority to procure, maintain, reutilize and distribute conventional ammunition.

c. The Air Force and the Navy should be required to relinquish those functions that duplicate or conflict with the responsibilities of the single manager.

2. The Secretary of Defense should consider establishing a central agency for conventional ammunition within DOD, if the services fail to implement the new directive.

3. DOD should adequately budget for the care and maintenance of conventional ammunition.

4. DOD should use less expensive packaging for training ammunition.

5. DOD should establish a uniform accountability system for its conventional ammunition.

Senator **Humphrey**. What is the Single Manager view of this report?

General **Burbules**. The report was just received and is under review by the Single Manager. A formal response will be provided for the record in the near future.

FUZE DISPUTE

Senator **Humphrey**. What role is the Single Manager playing in sorting out the fuze dispute between the Air Force and Navy?

General **Burbules**. There is no fuze dispute between the Air Force and Navy regarding FMU-112 and FMU-139 fuzes. The FMU-139 is experiencing some production delay and the Air Force intends to buy the FMU-112 until the FMU-139 is ready for production.

U.S. MARINE CORPS AMMUNITION REQUEST

Senator **Humphrey**. From standpoint of efficient procurement, what is your view of USMC ammunition request for fiscal year 1982, 1983, and 1984?

General **Burbules**. For all three years, some items being bought by the USMC are being bought in quantities which are less than economical procurement to a degree, as indicated in the table below. However, this must be viewed in the context of simultaneously considering other Service buys as well. The Military Services' fiscal guidance limitations still cause many programs to be planned at the less than economic production rate. In most cases, however, the production cost penalty is not excessive. For example, 368,000 smoke grenades are being bought by the Army, Navy, Air Force and Marine Corps, for $17.21 each. If an economic production quantity of 540,000 were bought, the cost per grenade would decline to approximately $16.00 each.

	Fiscal year		
	1982	1983	1984
USMC items being bought	45	59	67
Buy is less than economical	19	15	28

PRODUCTION ECONOMIES

Senator **Humphrey**. What additional responsibility or authority is required by the Single Manager to achieve greater economies in ammunition production?

General **Burbules**. The Single Manager requires no additional responsibility or authority at this time. The newly established Office of the Executive Director for Conventional Ammunition (EDCA) provides a dedicated, jointly-staffed, Single Manager organization in the Washington, DC area, to integrate and harmonize the Services' ammunition programs. The EDCA will seek innovative ways to achieve maximum efficiencies and economies within the authorities and responsibilities of DODD 5160.65 and the Single Manager for Conventional Ammunition Charter.

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY, ANSWERS SUPPLIED BY GEN. W. G. CARSON, JR.

MARINE CORPS AMMUNITION

Senator **Humphrey**. How does the fiscal year 1983 request improve training for artillery and tank crews?

General **Carson**. The Marine Corps' training policies and standards will not change as a result of the fiscal year 1983 request. Fourteen percent of the fiscal year 1983 request is for training. This will allow a minimal increase in training for tank and artillery crews.

Senator **Humphrey**. How many training rounds per year per crew will this training budget support? Compare this with fiscal years 1979-82.

General **Carson**. The training rounds per crew per year for artillery and tanks that the fiscal year 1983 budget will support are as follows:

Type weapon:	*Rounds per crew per weapon*
105mm tank, M60A1	92
155mm howitzer	296
8 inch howitzer	61

This represents a minimal increase over previous years training.

Senator **Humphrey**. The USMC request also shows a significant drop in tank and mortar ammunition. What accounts for this change?

General **Carson**. In fiscal year 1982 the Marine Corps received a supplemental increase of which $45.6 million was applied to tank and 60mm mortar rounds. The result was attainment of the acquisition objective of the 105mm, APFSDS-T tank round and the 105mm, HEAT-T tank round and a substantial increase to the 60mm mortar ammunition. The fiscal year 1983 request includes $3.6 million for 60mm mortar HE rounds. The fiscal year 1983 program was constrained by production backlog problems with the 60mm HE round. Additionally, this is the only mortar round available for production during fiscal year 1983.

Questions Submitted by Senator Gordon J. Humphrey, Answers Supplied by Gen. William P. Bowden

AIR FORCE TRAINING ORDNANCE

Senator **Humphrey**. How does the Air Force measure its requirements for training ordnance? How will the fiscal year 1983 request improve training and proficiency over previous years?

General **Bowden**. Annually each Air Force unit forecasts its munitions training requirements for the next 5 years. At each base these forecasts are aggregated and checked by munitions supply personnel. The aggregated forecast is then forwarded to the major command where it is reviewed for compliance with authorization documents and known changes in force structure, unit mission, and aircraft conversions. Major command exercise munitions requirements are added if necessary and the results forwarded to Air Force Logistics Command (AFLC). AFLC aggregates all forecasts, compares them to on-hand and due-in stocks, and computes a buy required.

Annually, representatives from the Air Staff offices responsible for aircrew training, munitions maintenance and supply, small arms training, and security police training meet and review the total forecasts and recommend changes to the major commands. Once the forecast is finalized, it is compared to the munitions on-hand and due-in for the next year to determine if sufficient stocks will be available to meet requirements. If stocks will not be sufficient and no alternate source of supply can be found, each command is allocated their fair share of those available. The allocation or forecast, whichever is less, then becomes the limit that command may use in the next year. AFLC monitors orders by the commands and rejects any that would allow overexpenditure.

Semiannually, representatives from the Air Staff offices responsible for budgeting and programming munitions funding meet with the AFLC item managers to determine budget and buy requirements for all active procurement years, the budget year, and the next four years. At this time, forecasts are again reviewed and compared with the latest consumption data to insure requirements are correctly stated. In cases where force structure or policy changes require funding changes for training munitions, they are reviewed during the Program Objective Memorandum deliberations at major commands and throughout the Air Staff and DoD review.

The fiscal year 1983 request fully funds the training munitions requirements for all Air Force personnel. This request, when combined with prior year requests, provides for one full year of training, maintains pipeline stocks, and does not require drawdown of war reserve stocks. This request is based on training requirements sized to programmed training and exercise plans. These, in turn, are sized within programmed personnel and flying hour authorizations.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY GEN. LAWRENCE F. SKIBBIE

AMMUNITION PRODUCTION BASE

Senator LEVIN. General Skibbie, what is the current state of our ammunition production base? How large is the gap between our current days of supply for our war-reserve stocks for ammunition and the length of time it would take to gear up the ammunition production base to sustain a conventional war?

General SKIBBIE. Since Vietnam, the Ammunition Production Base has been reduced to its present state which consists of the following:

	Total	Active
Government-owned, contractor-operated plant	25	11
Government-owned, Government-operated plant	3	3
Contractor-owned, contractor-operated plant with plant equipment packages	92	27

Since 1970 over $2.2 billion has been invested in the base for modernization and expansion.

The gap between our current days of supply for our war-reserve stocks for ammunition and the length of time required to gear-up the production base to sustain a conventional war is considerable.

The days of supply of stock ranges from [deleted] and the time to reach maximum production ranges between [deleted] for a warm base (items in production) and [deleted] for a cold base.

COPPERHEAD COST GROWTH

Senator LEVIN. General Skibbie, as you know, the unit cost of the Copperhead projectile has increased significantly over the original cost estimates.

For example, in the fiscal year 1979 Five-Year Defense Program the Army was projecting that by fiscal year 1982 you would be procuring 10,000 Copperhead rounds for $122 million, or $12,000 each. The fiscal year 1982 program now includes just 3,800 rounds for $102 million, $26,789 each.

What have been the principal problems leading to this cost growth?

General SKIBBIE. The Copperhead numbers referenced as being in the fiscal year 1979 Five-Year Defense Plan and the fiscal year 1982 program are unfamiliar to us. We checked the Five Year Defense Plan (FYDP) which supported the President's Budget for fiscal year 1979, and it listed 30,000 projectiles for $236.5 million as the plan for fiscal year 1982, or $7,883 each (in fiscal year 1979 dollars). That plan was based on a total program buy of 110,236 rounds. Since then, the program was reduced to 44,666. This required the Army to change the fiscal year 1982 plan to 4,550 rounds for $141.1 million, or $31,011 each (in fiscal year 1982 dollars).

The principal problems leading to this unit cost growth of $23.1 thousand are program changes in quantity, production estimates and inflation. The Army reduced the planned procurement (from 110 thousand to 44 thousand) in 1979 because of greater knowledge of Copperhead's performance capabilities (particularly under obscurants). Even though this reduces the amount required for buying the total quantity, it increases the unit cost because of smaller annual production rates. Original investment by the Army to facilitize Copperhead production was at a monthly rate of 700. Any procurement quantity that results in a monthly rate less than 700 incurs greater overhead burden than at 700. Our production estimates for fiscal years 1980 and 1981 were too optimistic in that we did not recognize all the start-up problems that were incurred in producing a complex missile fired from a cannon. For example, metal parts used in the projectile require very exacting tolerances. To achieve this degree of precision without degrading production rates requires special purpose tooling and very exacting manufacturing procedures. Proving out this tooling and refining the procedures continued during the initial months of production. Also occurring during this time were start-up problems associated with the manufacturing of complex electronics and the gyro and seeker hardware for the guidance package. These manufacturing problems were not tolerant to relaxation of specifications that would have reduced costs at the expense of reliability. Additionally, there were major subcontractors who also experienced similar problems. Our prime contractor has made significant strides to improve his production capability. The company has committed heavily its own capital in manufacturing improvements, approximately $33 million. With their positive move toward negotiating a Firm Fixed Price contract for fiscal year 1982, the contractor is motivated to stop cost growth.

FISCAL YEAR 1982–83 COPPERHEAD UNIT COST

Senator **Levin**. Are you achieving the fiscal year 1982 unit cost of $26,800 per round this year?

General **Skibbie**. The fiscal year 1982 procurement is not yet under contract. An unnegotiated Firm Fixed Price proposal has been received from the contractor. Our latest fiscal year 1982 unit cost estimate (including the contractor's price and government costs) is $31,011. This is based on an approved procurement of 4,550 Copperhead projectiles, for $141.1 million.

Senator **Levin**. Do you expect to be able to achieve the $24,066 unit cost projected in the budget for the fiscal year 1983 buy?

General **Skibbie**. The projected fiscal year 1983 unit cost of $24,066 will most likely increase. Prior to submission of the fiscal year 1983 President's Budget, the Procurement Army Ammunition Appropriation that included Copperhead was reduced for changes in such factors as inflation rates and projected ammunition working capital fund efficiencies. Simultaneously, inflation rates for missiles increased. Because of Copperhead's peculiar missile characteristics, where it uses sophisticated componentry and has more than 1,100 parts, we determined the reduction of Copperhead dollars was disproportionate to the actual requirements to support buying the 7,629 rounds requested for fiscal year 1983. We are working to resolve the differences internally and will provide an accurate answer to this question when we submit the next Copperhead Selected Acquisition Report (SAR).

COPPERHEAD RELIABILITY

Senator **Levin**. According to the GAO, Copperhead has demonstrated an overall reliability between 60 and 70 percent since testing of production model Copperheads began in December, 1981.

Is this an acceptable reliability rate?

Has production model testing reached the 80 percent reliability level established as the goal by the Secretary of Defense back in 1979?

If not, when do you expect to achieve this reliability level?

General **Skibbie**. The production tests completed to date include First Article Test. The goal was 65 percent, and the projectile's actual performance was 70 percent. According to the reliability growth plan, this is an acceptable rate of growth. The prime contractor plans to demonstrate the 80 percent reliability goal, established by the Secretary of Defense in 1979, in the June 1982 timeframe. After accomplishing this milestone, the Army will no longer be constrained to a monthly production rate of 200 and will steadily increase that rate to 700, and improve reliability to above 90 percent.

COPPERHEAD DELIVERIES

Senator **Levin**. Copperhead deliveries are also apparently below Army objectives. According to GAO, through last January, only 36 percent of the planned deliveries were actually received.

What is the reason for these delivery delays?

Is the situation improving?

General **Skibbie**. The low number of deliveries is attributed to production start up problems in the first few months of production. These problems are isolated to manufacturing processes and individual workmanship. As experience accrues through actual production operations and validation test firings, the manufacturing processes and workmanship skills are improved. As these improvements occur, both delivery rates and product assurance increase. By the end of this month, the Army will have received 46 percent of its planned deliveries.

The term, Copperhead deliveries, represents those projectiles accepted by the Army. While only 36 percent of predicted deliveries have occurred, the contractor has actually performed 79 percent of the contractual scope of work. This is a more accurate indication of actual production status. Further, it assures the Army that the contractor is approaching the constrained monthly rate of 200 projectiles and can complete the first year's deliveries of 2,100 rounds on time, September 1982.

COPPERHEAD PROGRAM EXECUTION

Senator LEVIN. Since fiscal year 1980, $290.6 million has been provided to procure 8,000 Copperhead rounds. In fiscal year 1983, the Army is requesting an additional $187.4 million to procure 7,629 projectiles. General Skibbie, given the past cost growth and delivery delays, as well as the continued testing problems associated with the Copperhead program, what are the reasons for the Army's optimistic assessment that you can execute this large request on time and within budget?

Why shouldn't Congress defer any large increases in the Copperhead production rate until we are assured that its cost growth has been contained, its technical problems corrected, and its reliability raised to the required level?

General SKIBBIE. According to official Army procurement records, $329.9 million has been provided to buy 8,750 rounds from fiscal year 1980 through fiscal year 1982. Our fiscal year 1983 request includes 7,629 projectiles for $183.6 million. We have overcome the initial production start-up problems, and we do not anticipate any recurrence. The contractor's internal production rates have steadily increased from month to month as has production reliability. We do not believe in artificially constraining the program beyond that already imposed by the Secretary of Defense wherein the monthly delivery rate cannot exceed 200 until 80 percent reliability is demonstrated. This reliability milestone will be accomplished by June 1982. Actual production unit costs are decreasing. This means that costs will be under definite control when we complete negotiations for a fiscal year 1982 Firm Fixed Price contract. Many of the forecasted cost reductions are rate and quantity dependent. They will not occur if either rate or quantity is lowered since people and machinery invested by the Army would not be used to the optimum rate.

155MM PROJECTILE, SMOKE, WP

Senator LEVIN. General Skibbie, according to the GAO, the production facilities for the metal parts of the 155mm Smoke screening round and the Load, Assemble and Pack facilities will not be completed until September 1983, the last month of fiscal year 1983.

Are these completion dates correct?

General SKIBBIE. The completion date for the Load Assemble and Pack facility is Sep 1983. The project to construct additional metal parts facilities has been deferred. The XM825 Smoke projectile uses the same projectile metal parts as the M483A1 dual purpose improved conventional munition with minor modifications. In the near term there is sufficient M483A1 metal parts production capability to produce the projectile metal parts for the XM825.

Senator LEVIN. If so, why is the Army requesting $16.1 million and the Marine Corps requesting $15.4 million for this new round in fiscal year 1983? Shouldn't this request be deferred until fiscal year 1984?

General SKIBBIE. The Army believes that the fiscal year 1983 XM825 production program can be completed within the 1983 funded delivery period. The long lead time items for this projectile are the projectile metal parts and other components. The Load Assemble and Pack facility is used for final assembly and is not needed until after September 1983.

Senator LEVIN. The budget justification books show a unit price for this Smoke-screening round of $519 for the Army and $570 for the Marine Corps in fiscal year 1983. Why is the Marine Corps paying a higher price for this round than the Army?

General SKIBBIE. During the OSD/OMB ammunition budget review the Army program was reduced to account for economies resulting from the working capital fund, overstatement of inflation and elimination of first destination transportation charges. The Marine Corps program was not reduced by a corresponding amount.

30MM HIGH EXPLOSIVE DUAL PURPOSE CARTRIDGE FOR THE AAH

Senator LEVIN. General Skibbie, the fiscal year 1983 request includes $55.1 million for the new 30mm explosive dual purpose cartridge. Is this cartridge solely for use on the AAH-64 helicopter?

General SKIBBIE. The XM789 is an electric-primed, aluminum cased, XM559 fuzed, High Explosive Dual Purpose (HEDP) cartridge for use in the XM230 weapon system. The weapon is used as the secondary armament system on the AH-64 (Advanced Attack Helicopter).

In addition to this primary Army requirement, the U.S. Marine Corps employ the British Harrier AV-8A equipped with two Aden MK IV 30mm weapons per aircraft and our NATO allies, as well as many other countries, use both British Aden and French DEFA 30mm automatic cannons on their aircraft.

Senator LEVIN. The fiscal year 1982 program of $12 million for the HEDP cartridge was intended to prove out the production facilities.

According to GAO, due to program slippages the production of the fiscal year 1982 quantities will now begin in September, fiscal year 1983 and be completed in March 1984.

Is this correct?

Does this mean that the fiscal year 1983 procurement would provide initial deliveries of ammunition concurrently with the fiscal year 1982 prove-out buy?

General SKIBBIE. Yes; it is correct that production of the fiscal year 1982 quantities will begin in September 1983 and continue through February 1984.

No, the fiscal year 1983 procurement and fiscal year 1982 prove-out buy would not be done concurrently. The fiscal year 1982 procurement contract will be awarded in Aug 1982 with deliveries occurring Sept 1983 thru Feb 1984 while the fiscal year 1983 procurement will be awarded in Feb 1983 with deliveries from Feb 1984 thru Jan 1985. This is normal contract and material lead time.

Senator LEVIN. Will the fiscal year 1982 program for the HEDP cartridge provide the initial quantities required to coincide with the first AH-64 deliveries?

General SKIBBIE. No; the purpose of the limited fiscal year 1982 buy is to prove-out the Initial Production Facility (IPF) line and to prove-out production tooling and processes on those items not previously made on production tooling, i.e., liner, low voltage primer, detonator, spitter and improved fuze. The IPF comes on line in fiscal year 1982. Any cancellation or disruption to the fiscal year 1982 procurement quantity will result in the line going cold before prove-out.

The fiscal year 1983 buy of 1,374,000 rounds scheduled for delivery during the period Feb 1984 thru Jan 1985 at the rate of 132,000 per month will provide adequate support to the 11 AH-64's being delivered to the Army through Aug 1984.

Senator LEVIN. Given the fact that the production for the AH-64 has not been awarded yet, and given that the initial prove-out run for this cartridge has been delayed, wouldn't it make sense to delay full-scale production of this new cartridge until the fiscal year 1984 budget?

General SKIBBIE. Delay of full-scale production until the fiscal year 1984 budget is not recommended.

The production contract for 30mm ammunition will not be awarded until DSARC approval of AH-64 production. In addition, the AH-64 contract for the first 11 aircraft is now scheduled for 15 April 1982 with deliveries during the 2nd and 3rd quarters of fiscal year 1984. The current fiscal year 1982 and fiscal year 1983 procurement buy profiles are structured so as to maintain a balanced program in support of aircraft deliveries while retaining a hot base with continuous production, and the opportunity to prove-out an Initial Production Facility prior to full-scale production. Therefore, the present fiscal year 1982 and fiscal year 1983 procurement buys should remain unchanged. Any disruption to this profile creates an imbalance to the program and a threat to timely training and overall fielding of the system.

In addition, if the Initial Production Facility is allowed to go cold prior to scheduled production, the storage and maintenance of the production line would increase the cost.

155MM AREA DENIAL ARTILLERY MUNITION

Senator LEVIN. The fiscal year 1983 budget includes $115 million to procure 26,700 area denial artillery munition projectiles for the Army and Marine Corps.

According to GAO, the Product Manager for this round believes that due to production backlogs only 14,000 of the 26,700 rounds requested should be produced in fiscal year 1983.

This would cost only $64 million of the $115 million requested.

General Skibbie, is the Army considering lowering the fiscal year 1983 production of this round? If so, will the Army or Marine Corps buy be reduced?

General SKIBBIE. The Army plans to produce 18,800 ADAM rounds in fiscal year 1983, a reduction of 7,900 rounds. Funds made available from this reduction ($26.1M) will be realigned within the ammunition account to support other unfunded training and war reserve requirements. The Marine Corps buy will be reduced from 12,711 to 11,800 rounds, a reduction of 911 rounds.

CARTRIDGE, 7.62MM BALL

Senator LEVIN. According to the GAO, the request of $6.4 million for 17.1 million 7.62mm ball rounds for use in the 7.62 machine gun may not be needed because the projected inventory at the end of the fiscal year 1983 funded delivery period will exceed the inventory objective of 3.9 million rounds. If this is the case, why is this round included in the fiscal year 1983 request?

General **Skibbie**. The 17.1 million 7.62mm ball rounds are included in the fiscal year 1983 request to support Army worldwide training and the inventory objective of 5.3 million rounds, not 3.9 million. The projected inventory at the end of the fiscal year 1983 funded delivery period with this program does not exceed the inventory objective of 5.3 million rounds.

CARTRIDGE, CAL .50

Senator **Levin**. According to the GAO, the $26.1 million request for 11.8 million ball and tracer rounds and 2.1 million API-T rounds does not appear to be based on the projected inventory position at the end of the fiscal year 1983 program. Why are these rounds being requested?

General **Skibbie**. The 11.8 million ball/tracer rounds for the cal .50 Machine Gun are being requested in the fiscal year 1983 program in order to support worldwide training and 90 day Depot Level Requirement. Even with the requested funding for this item, all training requirements cannot be satisfied. The 2.1 million rounds requested for the API-T support annual training and the 90 day Depot Level Requirement. Program does provide inventories that exceed requirements and could be reduced by 392K at $.9M.

81MM SUBCALIBER PRACTICE ROUNDS

Senator **Levin**. According to the GAO, the fiscal year 1983 unit costs of $15 for sub-caliber practice rounds are twice the fiscal year 1982 unit cost of $7 per round. What has caused this dramatic increase?

General **Skibbie**. The $15 fiscal year 1983 unit cost is incorrect. The projected fiscal year 1983 unit cost is $7.16.

CARTRIDGE, 105MM, DS-TP

Senator **Levin**. According to the GAO, the training loss projection of the XM797 replacement round of 631,000 for the fiscal year 1983 funded delivery period is approximately twice that of all other years' estimates. Is this assertion by GAO correct? What is the reason for this increased projected training loss? Using realistic training loss projections, is it necessary to procure the training quantity requested?

General **Skibbie**. The assertion by the GAO is generally correct except for the fact that the training round in question is the M724 not the XM797 and the total training requirement for fiscal year 1983 is 610,000 rounds. Prior year training losses have been constrained by TOA limitation throughout the entire ammunition account. Also, the XM797 training round encountered technical development problems and will not be produced until fiscal year 1985. Last year it was expected that the XM797 would be produced in fiscal year 1983 and training requirements were reflected against that round. This is one of the highest training priorities in the Army and requested procurement, in addition to on hand assets, is required to meet this training need.

PROJECTILE, 155MM, HE, ICM (DP)

Senator **Levin**. In recent years, the 155mm projectile, HE, ICM has had numerous problems. Are these problems resolved now?

General **Skibbie**. The Army completed a thorough investigation of the M483A1 DP ICM problems in June of 1981. The Army considers all the problems with the round were identified. All production since February of 1981 has incorporated changes which corrected the earlier problems. There remain a number of rounds from production prior to February 1981 which must be screened for defects (microscopic cracks in the base plug) and refitted. Approximately 1.5 percent of those rounds screened to date have required replacement of base plugs due to cracks.

Senator **Levin**. Did any of these problems occur in fiscal year 1982?

General **Skibbie**. No.

Senator **Levin**. Have any new problems been encountered either in testing of complete end items or components?

General **Skibbie**. No.

Senator **Levin**. Is the Army confident that the full request of 428,000 rounds ($237.3 million) for the Army in fiscal year 1983 can be executed?

General **Skibbie**. Yes, the Army anticipates no problem in completing the full fiscal year 1983 program requested.

BACKLOG OF MARINE CORPS ADAM AND RAAMS ORDERS

Senator **Levin**. How does the Army plan to eliminate the Marine Corps' backlog of ADAM and RAAMS orders from prior years and produce the requested fiscal year 1983 quantities within the fiscal year 1983 funded delivery period?

General **Skibbie**. The Army will eliminate prior year backlogs for these items by increasing the output at the load assemble and pack (LAP) facility to a production rate which falls between the 1-8-5 (single shift) rate and the 2-8-5 (double shift) rate. This rate will also be used to assure that a reduced fiscal year 1983 program is produced within the fiscal year 1983 funded delivery period.

Senator **Levin**. Will the Army be able to fully meet the Marine Corps' request of 12,711 projectile, 155mm ADAM and 18,712 projectile, 155mm RAAMS? What reductions, if any, are currently planned from the Marine Corps' request?

General **Skibbie**. The Army will be able to provide 11,800 ADAM rounds to the Marine Corps from the fiscal year 1983 program, a reduction of 911 rounds. The Army will also provide 17,000 RAAMS to the Marine Corps, a reduction of 1,712 rounds. The quantity reductions are a result of revised unit cost estimates based on latest actual contract costs.

ITEMS PRODUCED AT OR BELOW MINIMUM SUSTAINING RATE

Senator **Levin**. The additional cost attributed to operating at the minimum sustaining rate (MSR) or below is highlighted in a fiscal year 1980 Army Analysis of production at the Lake City Army Ammunition Plant. The study revealed that planning DoD production over a 5-year period and operating active lines at or near 1-8-5 rates could provide large savings and still fulfill mobilization requirements. Analysis showed that this methodology could reduce plant costs for the 5 years from $530 million to $372 million, or 30 percent.

Which items in the Army's fiscal year 1983 appropriation request are scheduled to be produced at or below the MSR? For each item, how much will costs increase compared to a 1-8-5 production rate?

General **Skibbie**. There are three items in the fiscal year 1983 Ammunition Budget request that are scheduled at MSR or below. The items are as follows: Cartridge, 81mm, Illuminating; Cartridge, 4.2 Inch, Illuminating; Projectile, 155mm, HE, RAP.

The Army is paying a price penalty of approximately 20 percent by running production rates at or below MSR instead of a 1-8-5 rate.

155MM HIGH EXPLOSIVE ROCKET-ASSISTED PROJECTILE

Senator **Levin**. The fiscal year 1983 request for the RAP round includes a production run of 24,000 rounds for the Army and 15,000 for Foreign Military Sales, for a total of 39,000 rounds.

Last year, the Army reported that an optimum buy quantity for this round was about 93,000.

If a 93,000 production program produces the lowest unit cost, why does the fiscal year 1983 program only call for 39,000 rounds? Is the Army considering increasing the production for this round in fiscal year 1983?

General **Skibbie**. The fiscal year 1983 planned procurement program for the M549 155mm RAP round included quantities of 24,000 for the Army 15,000 current foreign military sales (FMS) and a 60,000 foreign military sales quantity carried forward from the previous year. The total of 99,000 rounds would have been an economical buy. However the 60,000 round FMS case has been cancelled and the Army will request an increase in the fiscal year 1983 program.

Senator **Levin**. What would it cost to bring this round up to an economical buy quantity in fiscal year 1983?

General **Skibbie**. The Army requires an increase of 48,000 rounds at a cost of $35.4 million in order to produce at an economical rate.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN, ANSWERS SUPPLIED BY GEN. WILLIAM P. BOWDEN

RELIABLE FOR DURANDAL

Senator **Levin**. (Fiscal year 1983 request: $9.2 million for 350 bombs) According to the General Accounting Office, test results have demonstrated a reliability for this bomb of only about 60 percent. The sole source for procurement of this bomb is the Matra Corporation of France.

Is this reliability figure of 60 percent correct?

General **Bowden**. The demonstrated reliability of the Durandal during Air Force testing was 60 percent. We believe the reliability of this weapon can be increased to approximately 80 percent by incorporating some minor improvements prior to production.

RELIABILITY ACCEPTABLE TO AIR FORCE FOR DURANDAL

Senator **Levin**. Is this reliability acceptable to the Air Force?

General **Bowden**. Production weapons will have reliability improvements incorporated which are designed to meet a goal of 80 percent and we believe this is acceptable. The Air Force will evaluate past testing and the results of the Follow-On Operational Test and Evaluation (FOT&E) of the first production weapons to insure Durandal's reliability justifies our planned procurement.

The Air Force has attempted to develop several runway closure munitions. The results have been unsatisfactory. We evaluated several production weapons in an effort to field a weapon which could fill our need for a near-term, interim weapon. No other weapon (US or foreign) has demonstrated the capability to crater runways from the low altitudes and high speeds required for delivery aircraft survival.

DEVELOPING WEAPON TO MEET NEED

Senator **Levin**. Has the Air Force considered developing a weapon to meet this need instead of using an unreliable bomb which has to be procured sole source? Could this possibly be done for about the same cost?

General **Bowden**. The Air Force has attempted to develop runway cratering munitions that would be theoretically less expensive and meet the requirement. After spending significant research and development resources on these programs, we have yet to develop an inexpensive weapon for this role that meets the delivery requirements. We are continuing to work on submunitions to be carried by the Medium Range Air-to-Surface Missile (MRASM), which we believe will provide a long-range solution to the airfield closure problem. However, the cost of this missile will be much higher than Durandal. Its primary advantage will be the standoff capability it will provide.

REVISED QUANTITIES FOR ACM

Senator **Levin**. The fiscal year 1983 budget request includes $54.4 million for 2,000 anti-armor cluster munitions. GAO now says that this level of funding will buy only 1,755 weapons. Is this the case? What is the reason for the revised quantities?

General **Bowden**. During preparation of the fiscal year 1983 budget, it was estimated that 2,000 ACMs could be procured with the budget request of $54.4 million. Subsequent to the budget preparation, we have reestimated the quantities that could be procured with the $54.4 million. The latest estimate reflects that only 1,755 units can be procured. The reduced buy is primarily caused by increased contractor estimates.

PROBLEMS WITH ACM

Senator **Levin**. GAO has noted a number of problems with this munition, including delays in completing Developmental, Testing and Evaluation (DTE).

Last year, the Air Force told the Congress that testing would be completed in November, 1982. Now, according to GAO, completion is scheduled for September, 1983.

Should the production contract be awarded prior to the completion of Initial Operational Testing and Evaluation?

General **Bowden**. During early testing of the ACM several reliability related problems occurred which have delayed the development program. The Combined Development Test and Evaluation/Initial Operational Test and Evaluation Program was initially delayed until the spring of 1982. The test program has now been delayed until completion of the critical design review in July 1982. The one year test program will be started in August or September 1982 and be completed in September 1983.

The production contract was scheduled to be awarded in the second quarter of fiscal year 1983 following an Air Force production review. This same review will still be conducted but the release will be for low rate initial production, not full production release.

Approximately one-half of the test program will be complete at that time. Full production release will now occur in September 1983 after completion of the initial operational test and evaluation.

STOP-WORK ORDER ON ACM

Senator **Levin**. The GAO has indicated that the Air Force is considering canceling the ACM program and that a stop-work order was issued to the development contractor on March 1, 1982.

Was this stop-work order in fact issued? Why?

General **Bowden**. A 90-day stop-work order was issued on March 1, 1982. The stop-work order was issued while the Air Force evaluates the effectiveness of the ACM and other systems against an upgraded threat assessment.

CANCELLATION OF ACM

Senator **Levin**. Is this program being canceled? If so, what action has been taken by the Air Force on the $16 million appropriated in fiscal year 1982 for long lead time materials?

General **Bowden**. The stop-work order was issued while the Air Force evaluates the effectiveness of the ACM and other systems against an upgraded threat assessment. If the effectiveness of the ACM is sufficiently high, the ACM program will be continued. If the effectiveness potential is too low, the ACM program will be terminated.

At the present time, the Air Force is reevaluating its anti-armor mission area. If ACM continues, the $16M of 1982 long lead funding will be used for ACM long lead materials. If the ACM is terminated, the long lead funding will be used to increase long lead funding for the Gator program or other anti-armor programs. We expect the decision on ACM to be made by the end of April 1982.

The long lead funding for ACM and Gator in 1982 was determined based on a pro rata sharing of tactical munitions dispenser long lead funding requirements. Approximately $10 million of the ACM fiscal year 1982 funding was for this purpose and must be retained, regardless of the ACM production status.

CONSUMPTION DATA FOR BDU-33

Senator **Levin**. According to the GAO, the most recent consumption data for the BDU-33 practice bomb shows a reduced need of about 444,000 bombs in fiscal year 1983. Has consumption data for this bomb been revised since submission of the fiscal year 1983 budget request?

General **Bowden**. The GAO analysis was conducted after the revised consumption forecasts for calendar years 1982–86 were received and correctly analyzed the data available at that date. As of now, even later inventory, consumption, and updated forecast data is available. The same analysis of the latest data shows:

Dec. 31 Inventory and prior funded due-in	2,949,675
Jan. 1982 to Sep. 1983 consumption forecast	2,345,957
Sep. 1983 forecast stock level	603,718
Oct. 1983 to Sep. 1984 consumption forecast	1,365,328
Pipeline stock level (135 days)	518,206
Required fiscal year 1983 buy	1,279,816

SAVINGS FROM LOWERED CONSUMPTION RATE

Senator **Levin**. What savings can be achieved in fiscal year 1983 from this lowered consumption rate in the procurement of new bombs?

General **Bowden**. The current analysis would indicate that the fiscal year 1983 budgeted procurement exceeds requirements by 289,024 BDU-33 bombs at a cost of $17.43 each. The total cost represented by this quantity is $5.0 million.

The three computations: the original budget justification, the GAO analysis, and the analysis presented above; all used the same procedures and only reflect the normal fluctuations caused by consumption variables over a 6-month period of time. The results of all three analyses are all within ten percent of each other. They are all forecasts of expenditures 3 years in the future. Because these analyses are all based on long range estimates, since any excess stock will be used to reduce future procurement needs, and due to the difficulty in restoring buys on short notice should future analyses show increased requirements, we recommend retaining the fiscal year 1983 requested budget as insurance against potential upward fluctuations in requirements between now and 30 Sep. 1984.

During 1980, just such a situation occurred, resulting from a contractor bankruptcy. This situation depleted our limited pipeline stock, and the Air Force had to reduce aircrew training consumption. In addition, to reduce the otherwise critical impact on training, we were forced to pay for priority transportation to ship BDU-33 practice bombs until deliveries could be increased, almost one year later. Other munitions programs had to be reduced in order to fund the increased BDU-33 program.

Senator HUMPHREY. I thank you, gentlemen, for your time and testimony this morning.

General CARSON. Thank you, sir.

General SKIBBIE. Thank you.

[Whereupon, at 12:45 p.m. the subcommittee adjourned, to reconvene subject to the call of the chair.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

WEDNESDAY, MARCH 17, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

ARMY, NAVY, AND AIR FORCE, OTHER PROCUREMENT

The subcommittee met in open session at 10 a.m. in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman) presiding.

Present: Senator Humphrey.

Staff present: Michael B. Donley, David S. Lyles, professional staff members; and Carol J. Rudolph, staff assistant.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony concerning the fiscal year 1983 service requests for other procurement. We are pleased to have with us Maj. Gen. Lawrence Skibbie, Director of Army Combat Support Systems; and Capt. James Hancock, Assistant Director of the Navy's Fiscal Management Division. In addition to these witnesses, the subcommittee has received the written statement of Brig. Gen. William Bowden, Deputy Director of Air Force Logistics Plans and Programs.

Fiscal year 1983 is the first year in which the Senate Armed Services Committee will authorize other procurement accounts. Applying mission-oriented analysis, these accounts have been separated and various components assigned to different subcommittees. The Preparedness Subcommittee will review approximately $1 billion—or one quarter—of the total request for other procurement.

This morning's presentation should provide a broad introduction to these accounts and their relationship to the accomplishment of service missions. More specifically, however, the potential for near-term readiness improvements through these accounts is of fundamental importance to our budget review.

Without objection, I will insert the prepared statement of Brig. Gen. William P. Bowden, Deputy Director, Logistics Plans and Programs, and Deputy Chief of Staff for the Air Force, in the record at this point.

92-819 O—82——49

[The prepared statement of Brig. Gen. William P. Bowden follows:]

PREPARED STATEMENT OF BRIG. GEN. WILLIAM P. BOWDEN, DEPUTY DIRECTOR, LOGISTICS PLANS AND PROGRAMS, DEPUTY CHIEF OF STAFF/LOGISTICS AND ENGINEERING, HEADQUARTERS, USAF

Mr. Chairman and members of the committee, I welcome the opportunity to discuss with you the Air Force, Other Procurement Appropriation and in particular the 1983 budget request. The Other Procurement Appropriation consists of four separate budget programs; munitions and associated equipment, vehicular equipment, electronics and telecommunications equipment, and other base maintenance and support equipment. Also included within the appropriation are the classified selected activities and special update programs. Excluding the classified programs, the fiscal year 1983 Other Procurement request is $3.1 billion.

Today, my specific purpose is to describe the preparedness portion of the Other Procurement request. The elements we have identified as preparedness related in the fiscal year 1983 program are composed of equipment in the Base Maintenance and Support Equipment budget activity and the preparedness portion of the Electronics and Telecommunications program. Collectively, the preparedness elements total $710 million or 23 percent of the Other Procurement appropriation.

I would like to begin with a discussion of the Base Maintenance and Support Equipment program and follow with a synopsis of the preparedness communications elements.

BASE MAINTENANCE AND SUPPORT EQUIPMENT

The Other Base Maintenance and Support Equipment budget activity provides a wide variety of equipment for the operation of air logistics centers and air terminals, base support, productivity enhancement and personal safety. The funding requested supports all major commands and separate operating agencies including the Air Force Reserve and Air National Guard. The equipment procured is critical to our ability to operate and maintain Air Force weapon systems.

The fiscal year 1983 budget will provide mechanized material handling equipment at our Air Logistics Centers and air terminals throughout the Air Force. The mechanized equipment includes storage and retrieval systems which eliminate multiple handling of materials and improved the inventory control process. The mechanized equipment in the air terminals includes powered conveyors, bridge cranes and pallet buildup and tear down stations to assist in the rapid movement of air cargo. We are also implementing bar code marking and reading technology in Air Logistics Center shipping and receiving functions and base level supply activities.

In the base support area, the fiscal year 1983 budget procures test equipment such as oscilloscopes, signal generators, and frequency meters to test, align and maintain Air Force weapon systems. Calibration standards for the Aerospace Guidance and Metrology Center are provided as well as precision measurement equipment for the 119 base level Precision Measurement Equipment Laboratories. Base level maintenance, repair, and fabrication equipment such as lathes, grinders, drilling machines and welders are in the request. Mobile electric power generators, floodlights and ancillary electrical equipment used throughout the Air Force are procured in this budget program. The majority of the current generators are nonstandard, obsolete units and overhaul costs approximate the cost of new acquisition. The new generators will be a standardized version developed by the Department of Defense. A wide range of projects such as medical and dental equipment, aircraft arresting systems, pallets, and mobility containers are also procured in this area. The pallets and mobility containers are crucial readiness items required to expedite cargo handling and rapid aircraft turnaround. Base procured equipment, a vital program for the day-to-day operation of bases is included in the request. Equipment included is essential for kitchen and dining facilities, real property maintenance, vehicle maintenance, and administrative support.

Personal safety and rescue equipment includes life preservers and rafts, gas masks, and emergency breathing apparatus. All equipment is vital to the personal safety of our combat crews, passengers on military transport aircraft, missile support personnel, and others engaged in hazardous tasks.

Two budget lines that enhance the productivity of Air Force units are included in the request. Productivity Enhancement provides funds at the local base level for equipment costing more than $3,000 but not more than $100,000. Individual projects amortize the total investment cost in less than 2 years. Productivity Investment is similar to Productivity Enhancement except for the thresholds. Projects must cost more than $100,000 and amortize in less than 4 years. OSD directs the projects to be funded from service submittals. These programs emphasize improvements in administrative, maintenance and medical functions and communications standardization.

PREPAREDNESS COMMUNICATION

The Air Force fiscal year 1983 Preparedness Communications Procurement Program will provide modern, interoperable communications, command and control (C^3) systems that will enhance the Air Force capability to provide rapid, reliable data to Air Force commanders and key decision-makers. The program is divided into three categories in the Air Force fiscal year 1983 request for $425 million: Defense-Wide Communications, Base Telecommunications, and Logistics Support. Brief descriptions of each category will be followed by several significant fiscal year 1983 procurement programs. The funds requested in these programs are solely for communications equipment used in ground applications only.

Defense-Wide communications are those C^3 systems and equipment that provide operational support for strategic, technical, rapid reaction, and general purpose forces. For instance, traffic control and landing systems and weather observation equipment provide information used by all commanders and aircrews whether they be assigned strategic, tactical, or reconnaissance missions. In fiscal year 1983, the Air Force requests $119 million to procure equipment that fits this category. A discussion of several of these procurement programs follows:

WEATHER OBSERVATION/FORECASTING SYSTEM AND TRAFFIC CONTROL AND LANDING SYSTEM (TRACALS)

Worldwide meteorological, forecasting, and space environmental equipment that provides realtime data regarding weather conditions is critical to Air Force operations planning and mission execution. TRACALS equipment is also essential to provide safe, orderly and expeditious aerospace vehicle movements on a worldwide basis. The fiscal year 1983 request will continue programs to modernize both of these critical systems with state-of-art, digital, solid state systems. Equipment that has been operating since the 1950's will be replaced.

DEFENSE METEOROLOGICAL SATELLITE PROGRAM (DMSP)

DMSP is an advanced weather satellite system which supports both strategic and tactical missions. It is a joint service program and DOD's most important single source of weather data. High quality visual and infrared cloud imagery and other specialized meteorological data are transmitted from two DMSP satellites in low earth orbit. Fiscal year 1983 funds will procure mission data processing central display modules which will produce high resolution transparency of DMSP data for use at Air Force Global Weather Central.

DEFENSE SATELLITE COMMUNICATIONS SYSTEM (DSCS)

The DSCS system provides super high frequency (SHF) satellite communications for secure voice and high data rate transmission for multiple users and supports WWMCCS, crisis management, intelligence, strategic defense, Presidential, and diplomatic communications requirements. Fiscal year 1983 funds will provide interconnect facilities to interface DSCS terminals to the jam resistant communications network and will provide solid state uninterruptable power systems to six DSCS locations.

AUTOMATIC DATA PROCESSING EQUIPMENT (ADPE)

The Air Force procures standard off-the-shelf computer and associated peripheral equipment for all levels of command and organization. ADPE equipment supports operational strategic and tactical missions as well as general purpose requirements. Purchase candidates are identified as a result of mission requirements and through economical analysis to determine cost effectiveness of purchase versus lease alternatives. Fiscal year 1983 procurement funds will provide equipment for 58 projects.

WIDEBAND SYSTEMS UPGRADE PROGRAM

The Air Force requests funds to continue a program to improve the quality, capacity, and survivability of critical C^3 wideband systems located worldwide. Fiscal year 1983 funds will upgrade the Defense Communications System (DCS) terrestial wideband system extending from the United Kingdom through Belgium, Holland, and the Federal Republic of Germany into Northern Italy. This system is referred to as the Digital European Backbone (DEB). The ongoing upgrade will provide a secure digital medium to support minimum essential circuit requirements of all U.S. European headquarters and operating locations. When completed, the DEB will support all command and control, warning, surveillance, and logistics support voice and data communications in Europe.

AIR BASE GROUND DEFENSE

The Air Base Ground Defense System provides physical security protection for critical operational resources and weapons stockpiles. The increase in terrorist threats has underscored the importance of the sensory and detection equipment developed and procured for air base ground defense. Fiscal year 1983 funds provide semi-permanent deployable long-range personnel/vehicle detection sensors.

The Base Telecommunications Procurement Program provides communications equipment to each Air Force base. The equipment provides inter- and intra-base connectivity through telephone systems, automatic message processing equipment, radio communications, and sophisticated computers. The fiscal year 1983 Air Force request for this category of equipment is $180 million. A brief discussion of representative procurement programs follows:

COMMON USER COMMUNICATIONS

Several significant procurement programs affecting base communications require fiscal year 1983 funds. The Base Level Data Automation program will replace obsolete and technically deficient computer systems currently supporting 15 major functional areas at base level. Functional area examples are supply, maintenance, civil engineering, personnel, and payroll. A related program will begin in Europe in fiscal year 1983. The modernization program in Europe and Pacific theaters will house computers in tactical shelter complexes. The shelters will include self-contained power, chemical warfare protection and electromagnetic hardening. Another significant effort is the conversion of card-dependent high speed data systems to magnetic tape systems. Logistics replacement programs for obsolete government-owned telephone exchanges and logistically difficult to economically support radio systems will require fiscal year 1983 funds as well.

FIXED PLANT TELETYPEWRITER REPLACEMENT PROGRAM

Fiscal year 1983 procurement funds will continue the replacement of 1940–50 vintage teletypewriters.

FIXED PLANT HIGH FREQUENCY REPLACEMENT PROGRAM

Fiscal year 1983 procurement funds will continue a multiyear procurement replacement program for obsolete, hard-to-support 1940–50 vintage high frequency base radios.

PRODUCTIVITY INVESTMENT PROGRAM (PIP)

Productivity enhancing investments can result in great cost savings and at the same time improve operational performance. In fiscal year 1983 the Air Force requests funds to standardize worldwide COMSEC equipment at over 210 locations. Expected life cycle return on these investments is 7 to 1.

The final Preparedness Communications Procurement Program category is Logistics Support. The Air Force fiscal year 1983 request for $125 million will procure essential spare parts modifications, and inventory control assets. A brief discussion of these programs follows:

SPARES AND REPAIR PARTS

The electronics and telecommunications equipment spares and repair parts program is the lifeblood of the Air Force C^3 system. The program consists of both initial and replenishment (follow-on) spares. Spares are required to be available upon delivery of newly acquired systems. The first 2 years of spares and war readiness support parts are procured with initial spares funds which enable pipeline spares support until the parts are stocklisted and become part of the wholesale logistics automated requirements computation system. These follow-on computed requirements become replenishment spares. Fiscal year 1983 funds ($58M) are required.

MODIFICATION PROGRAMS

In many instances the Air Force chooses to modify existing systems rather than procure new equipment. Safety deficiencies, operational reliability/maintainability problems, logistics support difficulties, and new or expanded operational capabilities are satisfied with modification procurement dollars.

Mr. Chairman, that completes my prepared statement.

General Skibbie, may we have your statement, please?

STATEMENT OF MAJ. GEN. LAWRENCE F. SKIBBIE, DIRECTOR, COMBAT SUPPORT SYSTEMS, OFFICE OF DEPUTY CHIEF OF STAFF FOR RESEARCH, DEVELOPMENT, AND ACQUISITION, DEPARTMENT OF THE ARMY

General **Skibbie**. Yes, sir. With your permission I would like to submit my statement for the record and again summarize it with a short briefing.

Senator **Humphrey**. Fine, thank you.

General **Skibbie**. I was very happy to hear you mention near-term readiness because that really is the essence of other procurement programs.

The other procurement Army appropriation totals about 25 percent of the total Army procurement dollars. The portion which we will be talking about today is about one-quarter of that, or about $1 billion. The other procurement Army activity 3, account is commonly referred to as other support equipment.

I often say to my contemporaries in the Pentagon that it is not very exciting equipment, but it is the equipment that is really the essence of readiness because without it guns do not fire; planes do not fly; and missiles do not fly.

I do not think it begs the questions to say that without other procurement Army 3 there is no other equipment that constitutes the nail, the shoe, and sometimes the horse without which a kingdom is lost.

Let me just briefly say that as I mentioned, we have about $4.6 billion in other procurement Army [OPA], about $1.3 billion OPA1, about $2.3 billion in OPA2, and roughly $1 billion in other support equipment, and I will talk primarily about other support equipment. So, that is about 6 percent of the total Army procurement dollars.

Senator **Humphrey**. Excuse me before you go on, you indicated communications and electronics, does that embrace all Army communications?

General **Skibbie**. That embraces all Army communications, sir, radios, radars, electronic intelligence devices—let me think of some other examples—sensors.

Senator **Humphrey**. How about vehicles?

General **Skibbie**. Pardon?

Senator **Humphrey**. What about the vehicles category?

General **Skibbie**. The vehicles there are both tactical and support vehicles, tactical and nontactical vehicles. That would be basically 5-ton trucks, 10-ton trucks, the replacement for the Jeep—what we are terming the high mobility multipurpose wheeled vehicle, small special unit support vehicle. That constitutes the major portion of the resources there. That is about, as I mentioned, $1.3 billion for 1983.

Senator HUMPHREY. Thank you.

General SKIBBIE. Now, when we look at other procurement Army, the account is really the critical link in the readiness chain, specifically that near-term readiness chain.

General Meyer, our Chief of Staff, talks about logistics functions, and I have listed those logistics functions down here in the lower left. He calls those the "Sinews of Support."

SINEWS OF SUPPORT

Ammunition; fuel; repair parts; casualties and evacuation; supply and SVC; engineer; transportation.

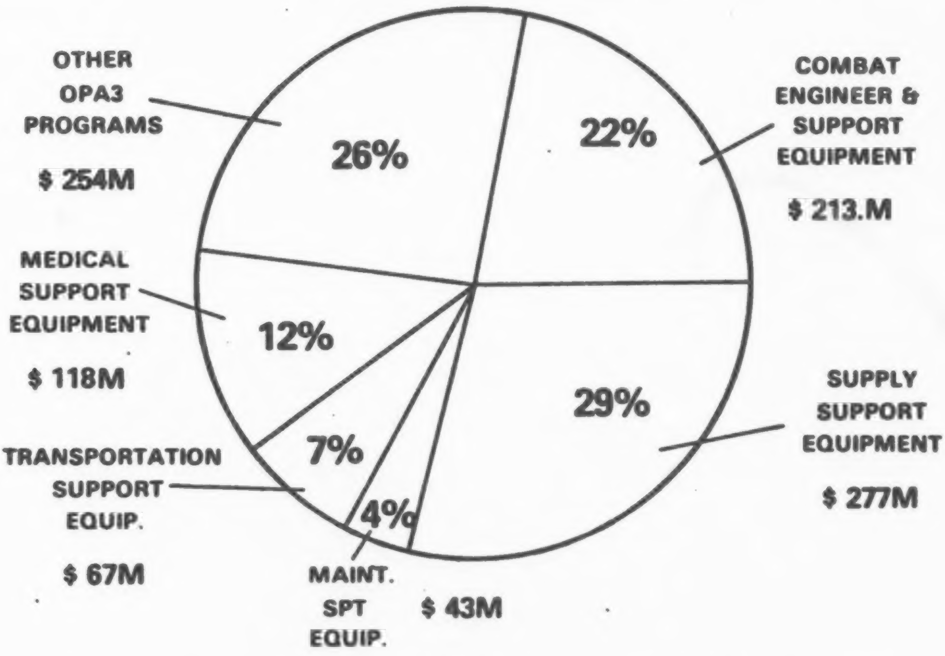
Now, if you look at the equipment we are buying, other support equipment [OPA3], it supports or does each one of those logistics functions, which are as the sinews of support.

If we look at ammunition, it does not supply the ammunition but it does support it because it buys the materiel-handling equipment. If you look at the fuel, it does not buy the fuel but it provides the fuel distribution system. The same thing applies with repair parts and casualties and evacuation, it buys all the medical equipment whether it is tactical or nontactical, for the entire Army.

Supply and service, it buys chemical defense equipment and water equipment. Engineer equipment, it buys all the commercial engineer construction equipment which our engineers use—such as scrapers and graders. It even buys the controversial M9, armored combat earthmover, although we are not requesting funds for that this year.

In the transportation area, it does not buy the trucks and vehicles, but it does buy watercraft and rail cars. So, it really supports every element of the sinews of support.

FUNDING PROFILE OF OPA3 MISSION AREAS



Now, if we look at the OPA3 account this year, we find about 29 percent of that billion dollars, $277 million, in what we call supply support equipment. Some examples would be combat service support equipment, materials handling equipment, petroleum equipment, water purification equipment as well as chemical defense equipment.

Over here, the next item, is the other OPA3 programs. It is, in essence, those things I cannot categorize in these other categories, but it includes nonstandard training devices. For instance, training devices that are not associated with a particular weapon system such as the MILES system which I mentioned yesterday—multiple integrated laser engagement system—where you have laser sensors on your body or on your tank. Then the other soldiers have a laser attached to their rifles. When they fire the blank, the laser is fired. If it goes close to your sensor, you will get an indication that there was a near miss; if it hits your sensor, an alarm sounds and you are declared a casualty.

So, it very realistically simulates combat, it is very excellent for training. That is the type of nonsystems training device that we would be procuring in this miscellaneous account.

Also, productivity-enhancing programs are funded. I will talk about these programs in a little more detail in just a minute.

Up here, is the combat engineer and support equipment. I think I very briefly mentioned those already—scrapers, graders, and

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other conventional engineer equipment. You would also find bridging, power generators, and topographic support equipment.

Medical support, that is again, the conventional health-care equipment that you find not only in a base hospital, but also in a tactical hospital.

Transportation support, I mentioned watercraft and rail, and of course maintenance support equipment, which is basically shop equipment and repair parts.

Now, we will look in a little more detail at each one of those categories. We will start out with the combat engineer and support program, If we look at the total dollars required for this category, remember, it was about 22 percent of the total, $213 million. We have 70 percent of those resources tied up in power generation and constuction equipment, not just graders but construction equipment.

Now, you get into the question of the need for this. If we look at the graders, the scoop loaders, and the scrapers, we find that overall the Army is short of what it requires to give itself initial equipment for its units and provide itself with necessary war reserves. That is not our total acquisition objective, this is just the amount to equip our units and give us necessary war reserves. We have shortages of the construction equipment that is required for that.

Of the equipment that we have, about one-quarter of it is overage. So, the fiscal year 1983 request will assist in correcting that shortfall.

SUPPORT EQUIPMENT

The other major cost in this area is power generation equipment. OPA3 buys all sizes of generators from 5 to 750 kilowatts. We are also short of the power generation equipment we require to equip our forces and give them necessary war reserves. Of the equipment we have, about one-eighth, or 12 percent is overage.

In the mine, countermine area, this is a relatively small investment. These are rollers to mount on a tank that push ahead of the tank and then detonate mines that are in its path either through pressure or because of the fact that they are metallic device and would detonate a magnetic mine.

This example of bridging equipment here is interesting because it is called a ribbon bridge. It is reverse-engineered from the Russians. This actually unfolds and floats on the surface of the water. You can use it as either a raft or put sections together to build a bridge. Several of those were used during the Air Florida crash for the rescue operations.

[Chart deleted.] Now, when we get into the supply support equipment, again the major cost items are MHE, chemical defense equipment, and combat service support equipment. Of course the prime item would be your chemical defense equipment.

What is shown there is the M8A1 alarm system. This is the detector portion that detects nerve agent when it is in the environment. It gives an alarm. In this same category of chemical defense equipment we also have decontaminating equipment as well as protective masks which are also called gas masks.

In the MHE—materials handling equipment—area, the picture shows a 50,000-pound rough terrain container handler, but we would also have 6,000- and 10,000-pound rough terrain forklifts.

Now, just an example of our inventory status on the rough terrain forklifts. Of the 6,000-pound we have, about two-thirds are overage. In the 10,000-pound forklift area with the fiscal year 1983 appropriation we will fulfill our requirements for equipping our forces and fill the war reserve. However, one-third of those 10,000-pound forklifts will be overage. We are also short of our requirement for 50,000-pound rough terrain equipment.

The combat service support equipment picture shows a firetruck. Actually it is procured through the Air Force because it happens to be an aircraft crash-rescue vehicle. We transfer funds to the Air Force and they buy it for us. The other major item of combat service support equipment would be a device called the "PADS", position and azimuth determining system that allows you to precisely locate the guns in an artillery battery for more accurate fire.

The other items that we are showing there are petroleum distribution system and this is the water distribution equipment that we would provide for the Rapid Deployment Force to be used wherever it might be required.

TRANSPORT EQUIPMENT

[Chart deleted.] Transportation equipment. I mentioned the watercraft. This happens to be the LACV–30 or lighter air cushioned vehicle. It is used for the logistics over-the-shore operation. Once the initial combat units are onshore, then the transportation or logistics over-the-shore becomes an Army responsibility. With the fiscal year 1983 buy we will have two complete companies of these vehicles. We will have 26 of a requirement for 30.

Railcars, we have had 100-ton railcars for moving heavy vehicles and heavy equipment during mobilization. Those 100-ton rail flatcars are becoming so old that the railroad regulations will require us to retire them. We are replacing them with 140-ton rail flatcars. This fiscal year 1983 procurement will give us about two-thirds of our requirements.

Maintenance equipment, that is merely replenishment spares for the type of equipment that you would be buying withing the OPA3 account, as well as shop equipment. It is only about 4 percent of the account, about $43 million.

Finally, medical support equipment, which is really three types including the combat zone hospitals which are actually standard DOD shelters. This is a standard shelter throughout the Department of Defense for field hospitals. This category also includes the equipment that goes in those standard shelters, as well as normal, conventional medical support equipment which we provide to base hospitals and clinics.

Finally, the over OPA3 program which includes, base commercial equipment. Base commercial equipment include items that cost $3,000 and over, that are nonstandard and that do not go into the standard units. They are not what we would term "table of organization" equipment. They go on bases. Some examples might be a streetsweeper; walk-in refrigerator or other types of kitchen equipment that are required for a large messhall.

Nonsystems training devices. The best example that I gave was the multiple integrated laser engagement system.

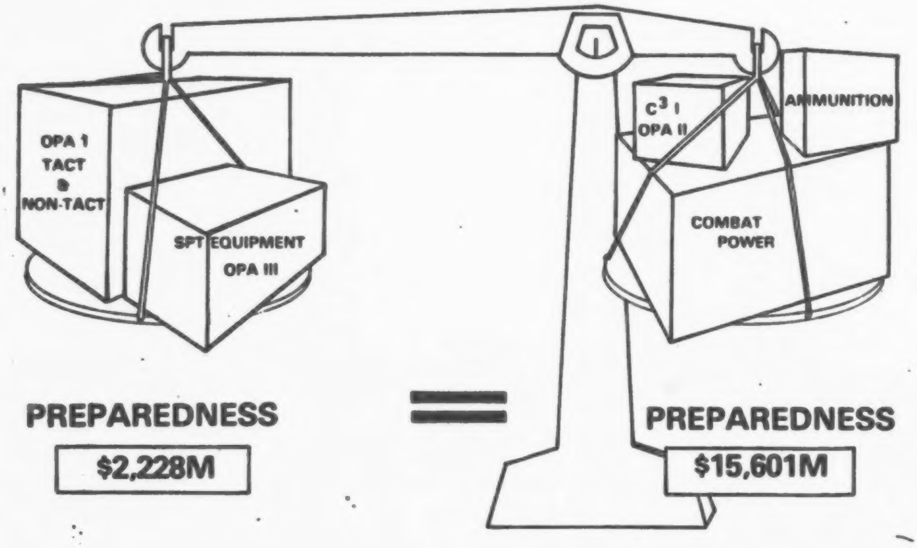
National training center. This year we are buying target systems for the ranges.

Finally the efficiency programs which are really threefold in number. We allow our commanders to propose means for saving money.

I think the best example was when I was the post commander at Rock Island Arsenal. Rock Island has three bridges over the Mississippi River, one of which was a rotating bridge. We had to have two people on that bridge at all times, one to operate it and the other to be down on the ground floor to block traffic. I used this system to buy automatic gates so that I could reduce the requirement for the man on the floor and thereby save the cost of that one individual.

So, that is the type of thing these efficiency programs do for the Army. It gives us an investment account that field commands can use. The investment has to be amortized in 2 years or 4 years depending on the specific program.

THE FINE BALANCE



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Finally, standard balance. This display depicts is that there is a lot of leverage in the OPA accounts. Leverage with regard to readiness. Note here in the preparedness side, we have the various elements of combat power that are very visible. You have guns, fighting vehicles, aircraft, missiles, ammunition, and communications and intelligence equipment. This year we are requesting resources of $15.6 billion for equipment in these areas.

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Now, supporting that and required for it to operate effectively is $2.2 billion for OPA1, which is tactical and nontactical vehicles and OPA3, other support equipment. So, you have a ratio of about 9 to 1. We think it is a very good investment.

With that, I am open to your questions, sir.

[The prepared statement of Maj. Gen. L. F. Skibbie follows:]

PREPARED STATEMENT BY MAJ. GEN. L. F. SKIBBIE, DIRECTOR, COMBAT SUPPORT SYSTEMS OFFICE, DEPUTY CHIEF OF STAFF FOR RESEARCH, DEVELOPMENT, AND ACQUISITION

Mr. Chairman and members of the committee, it is a pleasure to appear before you today to outline a part of the Other Procurement, Army (OPA) program. The Other Support Equipment Budget Activity (OPA3) represents 21 percent of the OPA budget. The equipment in this activity is critical to the support of the combat forces if they are to perform their combat mission and be properly sustained. General Meyer, our Chief of Staff, calls ammunition, fuel, repair parts, casualties and evacuation, supply and services, engineer functions and transportation functions our sinews of support. OPA3 either procures the equipment to support these functions or the function is dependent on OPA3 support equipment to be accomplish. Let me provide an example. Ammunition alone cannot support the combat soldier. It takes the forklifts (procured by OPA3) at each interface to move the ammunition from the CONUS-based production facility to the weapon system. In addition, containers also procured by OPA3 are utilized to efficiently move this ammunition forward. Again and again one can list similar examples that support this concept.

OPA3 consists of over 100 different types fo equipment. The multiplicity of this equipment may explain why this is the first year the OPA Appropriation has been subject to authorization. The majority of OPA3 equipment falls into five (5) major combat support mission areas. These areas are as follows:

Combat Engineer and Support Equipment. Supply Support Equipment. Transportation Support Equipment. Maintenance Support Equipment. Medical Support Equipment.

The combat engineer and support equipment represents 22 percent of the OPA3 budget and supports the following functional areas:

Construction Equipment. Mine/countermine Equipment. Bridging Equipment. Topographic Support Equipment. Power Generation Equipment.

Each funciton is necessary to the support of the combat mission. The supply support equipment represents 29 percent of the OPA3 budget and supports the following functional areas:

Chemical Defensive Equipment. Materiel Handling Equipment. Water Purification and Distribution Equipment. Combat Service Support Equipment.

Again, each of these areas is critical to the support of the combat mission. One must provide food, water, fuel, and ammunition to the combat soldier and provide the soldier with the ability to operate in a chemical environment.

The transportation support equipment area represents 7 percent of the OPA3 budget and supports the following functional areas: Watercraft. Rail. Containerization.

The Army cannot support the Rapid Deployment Force (RDF) in a Logistics-Over-The-Shore (LOTS) configuration or meet mobilization requirements to move CONUS-based units expeditiously unless these functional areas are fully funded.

Maintenance support equipment represents 4 percent of the OPA3 budget. The two functional areas, initial and replenishment spares plus shop equipment, directly impact readiness. Maintenance units must have the tools to perform the maintenance function plus the major components (i.e., engines, etc.) to repair equipment.

Medical support equipment contains both the tactical and installation hospital equipment necessary to support our military force both under combat circumstances as well as in peacetime operations. One should remember that civilian disasters usually require tactical hospital equipment to relieve the immediate pressures put on the civilian community.

Other programs represents 26 percent of our OPA3 budget request and provide overall support to the Army. Base Commercial Equipment, Non-Systems Training Devices, and army efficiency programs make up the majority of the funding under this category.

In summary, the OPA3 activity is a complex account from which resources are provided to support the combat force.

Senator HUMPHREY. Let us go on to Captain Hancock for his statement.

STATEMENT OF CAPT. JAMES E. HANCOCK, U.S. NAVY, ASSISTANT DIRECTOR, FISCAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

Captain HANCOCK. With your permission, Mr. Chairman, I will submit my statement for the record.

Senator HUMPHREY. Fine.

Captain HANCOCK. I have prepared a set of charts I am prepared to walk you through on those portions of other procurement Navy that this subcommittee is interested in.

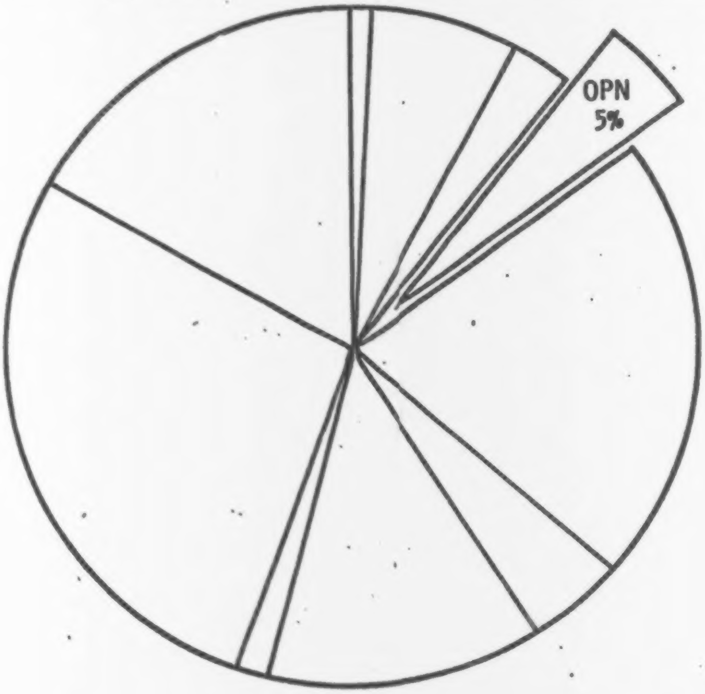
Senator HUMPHREY. All right.

Captain HANCOCK. First I would like to extend Rear Admiral Miller's apology, he wanted to be here this morning, but he had a previous engagement before the House Appropriations Committee and could not be here. So, I am sitting in for him.

Senator HUMPHREY. I see.

Captain HANCOCK. Very similar to the Army procurement, the Navy buys various types of equipment in this appropriation. We really say that we buy anything that is not a ship, an aircraft, a missile, or a torpedo—that is about what is in the other procurement Navy appropriation.

On the first chart you can see that the entire appropriation is about 5 percent of the fiscal year 1983 request for the Department of the Navy. The second chart shows you the entire appropriation in a little bit more specific detail with the request of almost $4 billion.



DEPARTMENT OF THE NAVY
OTHER PROCUREMENT, NAVY
FY 1983

As you can see, it is in seven budget activities and there are almost 400 individual line items within this appropriation that make up the equipment and commodities that we buy.

On the third chart is a highlight of those areas that this committee is particularly interested in. I am prepared to go down each one of those with a series of charts to focus your attention on the 16 percent of the other procurement Navy appropriation that your subcommittee is looking at, sir.

INDUSTRIAL FACILITIES SUPPORT

The first one is industrial facilities support equipment. In this line item we procure industrial plant equipment that is used to modernize the shore establishment of the Navy—examples are welding machines and lathes.

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DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
Industrial facilities support equipment	94.6	19.0	15.6

Procedures industrial plant equipment for modernization of Navy industrial activities: Welding machines; Lathes.

Fiscal year 1982–83 decrease due to financing method of industrial plant equipment.

The biggest part of the $19 million request in fiscal year 1983 will procure degaussing equipment for two Naval stations which will enable us to measure the magnetic signature of the ships and thus determine their susceptibility to magnetic mines and to mine warfare. That is, as you probably know, an area that the Navy has significant shortfalls in, in the entire mine warfare and mine countermeasures area. This is an attempt to correct that.

There is really an indirect impact on readiness here in that by measuring and taking corrective actions on the magnetic signature we can more or less make the ship immune, to a degree at least, to magnetic mines.

SPARES AND REPAIR PARTS

The second item is spares and repair parts. These funds will finance the spare parts for new equipments the navy has procured that have not transitioned into the supply support system yet. Examples of these are the AN/SPS–48 radar which goes on board our surface ships and the AN/BQQ5 sonar which is aboard our newest submarines.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
Spares and repair parts	110.0	112.5	142.4

Finance spare parts for new equipment that has not transitioned to Navy supply support: SPS–48 radar; BQQ–5 sonar.

These items obviously have a direct impact on readiness. These are the funds that will provide the spare parts to enable the technicians on board ship to correct equipment malfunctions.

GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT

The next area is general purpose electronic test equipment, or what we commonly refer to as GPETE. The moneys requested in fiscal year 1983 are those moneys to initially outfit new ships and shore activities with GPETE to fill their equipment allowances with the initial set of equipment the technicians will need to keep the equipment in an operational status. Obviously, without this

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equipment those technicians can do very little to keep equipment on the line.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAYV (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
General purpose electronic test equipment	17.4	36.5	48.2

OPN procures initial outfitting of GPETE for new ships/squadrons joining the fleet. O&MN procures replacement test equipment: Signal generator; Oscilloscope.

Increase in funding reflects a commitment to eliminate GPETE shortfalls.

Examples of the types of equipment that we procure in general purpose electronic test equipment are signal generators and oscilloscopes.

FLEET HOSPITAL SUPPORT EQUIPMENT

The next area is fleet hospital support equipment. This is a new procurement in fiscal year 1983 and the requested $74 million in fiscal year 1983 will procure three fleet hospitals. Those hospitals are going to be mobile, deployable units that will consist mostly of medical support equipment and medical equipment to handle casualties. Also included are the tents and breakdown shelters that are necessary to house those casualties until they can be moved out of that immediate area.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
Fleet hospital support equipment	0	74.3	107.1

Fiscal year 1983 funds will procure 3 hospitals.

Hospitals will consist mostly of tents and will be rapidly erectable.

These field hospitals are necessary to eliminate rapid deployment force medical treatment deficiencies.

CIVIL ENGINEERING SUPPORT EQUIPMENT

The next area the committee is interested in is what we call civil engineering support equipment. This is the Navy's rolling stock procurement program. This is where all our passenger vehicles, our trucks and trailers and the equipment that supports the Seabee Battalions are funded.

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DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
Civil engineering support equipment	82.7	93.5	117.8

Includes passenger vehicles; trucks; trailers; earth moving equipment; crushing, mixing, batching and paving equipment; lighting and power generating equipment; fire fighting equipment; weight handling equipment; telephone equipment; combat construction support equipment; and pollution control equipment.

Supports operating forces and shore establishment.

The $93 million that you see there is the eighth increment of a program to try to reduce the over-age status of our rolling stock, and it is the money necessary to support not only the shore establishment, but more importantly, the operating forces with all of the firefighting equipment and those kinds of things that are necessary.

SUPPLY SUPPORT EQUIPMENT

The next item is supply support equipment. There are two cost drivers in the $70 million for supply support equipment. One of them is forklift trucks which accounts for about $24 million of that $70 million. That will procure about 950 forklift trucks to replace some of the over 10,000 forklift trucks that we have in use.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT (OPN)

[In millions of dollars]

General program area	Fiscal year—		
	1982	1983	1984
Supply support equipment	63.9	70.8	79.2

Two big items are forklift trucks ($24.1 million) and automated materials handling systems ($24.4 million).

Forklift truck over-age position improves from 39 percent ashore and 12 percent afloat at end of fiscal year 1982 deliveries to 32 percent ashore and 9 percent afloat at end of fiscal year 1983 deliveries.

Fiscal year 1983 funds are for the fourth NISTARS (automated warehouse) system for naval supply centers. Funded to date are: (1) NSC Oakland—fiscal year 1980. (2) NSC Norfolk—fiscal year 1981. (3) NSC San Diego—fiscal year 1982. (4) NSC Jacksonville—fiscal year 1983.

The other big piece of supply support equipment that is the automated materials handling systems, which is

This particular system in fiscal year 1983 is being procured to go to Naval Supply Center, Jacksonville. You will notice on the chart that this is our fourth NISTARS system. The other three contracts have been let and we are starting to install the first one in Oakland.

TRAINING DEVICES

The next area is the training devices area. The $53 million request really is driven by the requirement for what we call *Perry* class pierside trainers. In fiscal year 1983 we are buying two of those. These are trainers that will allow you to come right alongside the pier, to tie up, to plug into a van arrangement, and, with your own sensors, to do a full-scale battle problem using your own people in their own spaces where they are familiar. It more or less stimulates your sensors.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal Year—		
	1982	1983	1984
Training devices	45.5	53.7	125.1

$15.5 million for submarine training devices.
$38.2 million for surface ship training devices.
Two big items in fiscal year 1983 are two *Perry* class pierside trainers ($18.1 million).

There are a myriad of trainers in here, ECM trainers, combat systems trainers for submarines that enable us to more effectively utilize the people's time and give them a degree of training and proficiency when they go to sea.

COMMAND SUPPORT EQUIPMENT

The next to the last area is the command support equipment line where we procure our medical support equipment like X-ray units, chemical analyzers, and radiograph machines. All the medical support equipment necessary to support both the fleet and the shore establishment.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal Year—		
	1982	1983	1984
Command support equipment	89.2	103.6	148.4

Medical support equipment ($30.8 million).
Productivity programs ($38.1 million): Manufacturing technology; productivity investment fund; productivity enhancing incentive fund.
Support of various Navy commands ($34.7 million): Chief of Naval Operations; Naval Oceanography Command; Bureau of Naval Personnel; Naval Telecommunica-

tions Command; Office of the Chief of Naval Operations; Office of Secretary of the Navy; Operating Forces.

Also included in the command support equipment line are items like cesium-beam clocks for the Naval Observatory.

COMPUTER ACQUISITION PROGRAM

The last area is the computer acquisition program. The $73 million request in fiscal year 1983 is the Navy's request for general purpose nontactical computers. We have one program called SNAP, which is shipboard nontactical automatic data processing. It is a system on board ship to automate supply inventory, personnel support, and financial management functions on board that ship, thus eliminating the need for many highly intensive manpower activities.

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

General program area	Fiscal Year— 1982	1983	1984
Computer acquisition program	52.5	73.5	95.2

Includes all Department of the Navy general purpose, nontactical automated data processing equipment.

Two significant programs are personnel support ADP equipment ($20.7 million) and shipboard operational ADP equipment ($19.5 milion).

Also in here as a cost driver is personnel support ADP equipment for the pay system throughout the Department of the Navy.

As you can see, Mr. Chairman, there is a myriad of types of equipment that are procured. I am now ready for your questions.

[The prepared statement of Capt. James. E. Hancock follows:]

PREPARED STATEMENT OF CAPT. JAMES E. HANCOCK, U.S. NAVY, ASSISTANT DIRECTOR, FISCAL MANAGEMENT DIVISION, OFFICE OF THE CHIEF OF NAVAL OPERATIONS

Mr. Chairman and members of the Subcommittee, I am Capt. James E. Hancock, U.S. Navy, Assistant Director, Fiscal Management Division, Office of the Chief of Naval Operations. It is a pleasure to appear before you to present the fiscal year 1983 budget request for those portions of the Other Procurement, Navy (OPN) appropriation which are under the cognizance of the Subcommittee on Preparedness.

As you know, this is the first time that the Other Procurement, Navy appropriation has been reviewed by the Armed Services Committees for the purpose of inclusion in the Department of Defense Authorization Act. I would like to congratulate the Senate Armed Services Committee on the fine job it has done thus far in working with the Department of the Navy to ensure that this initial review of OPN is both thorough and efficient. Your staff has been quite helpful to us over the past two months in letting us know how best to present an appropriation containing so many diverse equipments to the various Subcommittees.

NAVY, OTHER PROCUREMENT

The Other Procurement, Navy appropriation is essentially the same in program content and structure as presented to the Appropriations Committees last year. The fiscal year 1983 OPN budget request is $2,970.2 million. This request is $293.6 million over the revised fiscal year 1982 program. From a real program value point of view, this equates to an increase of $106.1 million in fiscal year 1983 dollars. There are a myriad of diverse equipment programs in this appropriation. Specifically, OPN finances the procurement of weapons and equipment other than aircraft, missiles, ships, and torpedoes. Equipments that are funded range from the latest electronic sensors and weapons systems to update our naval forces, to trucks, training equipments, and spare parts; from simple office equipment to sophisticated electronic systems. The funds requested in this appropriation finance equipments vital to the efficient operation of our ships and shore establishment, procures the ammunition to meet both training requirements and war reserve requirements, and provides the necessary training equipment to support operational shipboard and shore systems.

This request of $3,970.2 million continues to emphasize modernization and improvement of fleet readiness and is summarized in seven Budget Activities as shown below:

DEPARTMENT OF THE NAVY OTHER PROCUREMENT, NAVY (OPN)

[In millions of dollars]

Budget activities	Fiscal year—		
	1982	1983	1984
Ships support equipment	692.1	568.9	801.1
Communications and electronics equipment	1,174.1	1,488.0	1,761.6
Aviation support equipment	579.2	608.2	881.3
Ordnance support equipment	830.1	785.2	985.6
Civil engineering support equipment	114.4	172.8	287.3
Supply support equipment	75.9	91.2	118.4
Personnel and command support equipment	210.8	255.9	423.9
Total, other procurement, Navy appropriation	3,676.6	3,970.2	5,259.2

As you know, the Other Procurement, Navy appropriation is structured on an equipment/commodity basis, and the budget is officially submitted in an end item P-1 format summarized in these budget activities. Unlike the major procurement appropriations (Shipbuilding and Conversion, Aircraft Procurement, and Weapons Procurement) which have a relatively short list of end items, each having a fairly high dollar value, the OPN appropriation has nearly four hundred P-1 line items, each containing from one to thirty different equipments.

Of the $3,970.2 million requested for this appropriation in fiscal year 1983, $637.4 million (16.1 percent) is under the cognizance of the Subcommittee on Preparedness. The focus of today's presentation will be on the following general program areas which make up this segment of the Other Procurement, Navy budget request:

OTHER PROCUREMENT, NAVY (OPN) PREPAREDNESS ITEMS

[In millions of dollars]

	Fiscal year—		
	1982	1983	1984
Budget activities 1, 2, 3, and 4:			
Industrial facilities support equipment	94.6	19.0	15.6
Spares and repair parts (except strategic)	110.0	112.5	142.4
General purpose electronic test equipment	17.4	36.5	48.2
Subtotal	222.0	168.0	206.2
Budget activity 5:			
Fleet hospital support equipment	0	74.3	107.1
Civil engineering support equipment	82.7	93.5	117.8
Subtotal	82.7	167.8	224.9
Budget activity 6: Supply support equipment	63.9	70.8	79.2
Budget activity 7:			
Training devices	45.5	53.7	125.1
Command support equipment	89.2	103.6	148.4
Computer acquisition program	52.5	73.5	95.2

OTHER PROCUREMENT, NAVY (OPN) PREPAREDNESS ITEMS—Continued

[In millions of dollars]

	Fiscal year—		
	1982	1983	1984
Subtotal	187.2	230.8	368.7
Total	555.8	637.4	879.0

INDUSTRIAL FACILITIES SUPPORT EQUIPMENT

The first general program area is Industrial Facilities Support Equipment. $19.0 million is requested in fiscal year 1983, a decrease of $75.0 million from the fiscal year 1982 budget of $94.6 million. The reason for this significant decrease relates to a recent change in the Department of Defense funding policy for industrial plant equipment. In fiscal year 1982 and in all prior years, the OPN appropriation financed the procurement of all industrial plant equipment needed for the modernization of our Naval Shipyards, our Naval Air Rework Facilities, our ordnance facilities, and our other industrial activities. Because these equipment procurements were financed directly from appropriated funds, thereby providing these equipments to the industrial activity on a "free issue" basis, the investment cost of modernizing our industrial base was never passed on to the "customers" of those facilities. As a result of a recent decision by the Secretary of Defense, this whole funding mechanism has been changed. Commencing in fiscal year 1983, those activities which operate under the Navy Industrial Fund (NIF), a revolving account, will be authorized to utilize the NIF to finance the procurement of industrial plant equipment. The cost of these procurement will be passed on to the "customers" in the form of higher NIF rates. The only industrial plant equipment which will continue to be funded in the OPN appropriation will be in support of those industrial activities which do not operate under the NIF.

SPARES AND REPAIR PARTS

The second general program area is Spares and Repair Parts. $112.5 million is requested in fiscal year 1983, an increase of $2.5 million over the fiscal year 1982 budget of $110.0 million. Through the first half of fiscal year 1981 the OPN budget for Spares and Repair Parts was several times larger than the amounts budgeted in fiscal year 1982 and fiscal year 1983. Before April 1981 the OPN appropriation financed the procurement of three categories of secondary items: (1) Navy Supply System managed initial outfitting spares, (2) Navy Supply System managed replenishment spares, and (3) all contractor managed spares, also known as "interim" spares. Under this funding mechanism, all contracts for depot level repairable secondary items were financed from direct appropriations, and the spare parts were provided to the user on a "free issue" basis. Beginning in the second half of fiscal year 1981, however, the greater portion of the items in the first two categories migrated to the Navy Stock Fund, a revolving account. Under this system, all contracts for Navy Supply System managed depot level repairable secondary items (except aviation items) are financed with the contract authority of the Navy Stock Fund. As the items are required by the user, either for initial outfitting or for replenishment of depleted allowances, the user reimburses the Navy Stock Fund for the applicable Operation and Maintenance appropriation. If the user turns in a carcass, he pays a reduced price when he draws the replenishment item out of the Navy Supply System. The only secondary items which continue to be funded in the OPN appropriation are (1) Navy Supply System managed aviation spares, both initial outfitting and replenishment, and (2) all contractor managed spares. It is one of the goals of the Department of the Navy to ensure that the dollar value of contractor managed spares is kept to a minimum in any given fiscal year program. Each year we review the contractor managed programs to insure that each of them transitions to Navy Supply System management within a reasonable period of time.

GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT

The third general program area is General Purpose Electronic Test Equipment (GPETE). $36.5 million is requested for GPETE and associated Calibration Standards, an increase of $19.1 million over the fiscal year 1982 budget of $17.4 million. This significant increase in funding reflects the personal commitment of the Chief of Naval Operations to eliminate the GPETE shortfalls which have plagued both our forces afloat and our shore establishment for a number of years. The increased funding level, by itself, does not give the complete picture of the Navy's "get well" program for GPETE. Prior to fiscal year 1982 all nonaviation GPETE was funded in the OPN appropriation and was provided to the operating forces on a "free issue" basis. Beginning in fiscal year 1982, however, all contracts for GPETE are financed with the contract authority of the Navy Stock Fund. At the time of issue, the Navy Supply System is reimbursed with appropriated funds. In the case of initial outfitting, the OPN appropriation reimburses the Navy Stock Fund, and the GPETE is provided to the user on a "free issue" basis, while in the case of replenishment, the user must reimburse the Navy Stock Fund from the applicable Operation and Maintenance appropriation. As in the case of secondary items, if the user turns in a carcass, he pays a reduced price when he draws out the replenishment item. The fiscal year 1983 OPN budget request, therefore, provides for the reimbursement of the Navy Stock Fund for those pieces of GPETE which are required for initial outfitting.

FLEET HOSPITAL SUPPORT EQUIPMENT

The fourth general program area is Fleet Hospital Support Equipment. $74.3 million is requested in fiscal year 1983 for the procurement of field hospitals to satisfy the deficiency in Rapid Deployment Force Communications Zone medical treatment. These field hospitals will receive wounded sailors and marines from organic combat medical units for treatment and recuperation in the combat theater for rapid return to duty with minimal evacuation from the theater. Providing this treatment within the combat theater will reduce mortality as well as air and sea lift requirements. The Navy field hospitals will consist mostly of tents and will be rapidly erectable to begin treating casualties within five days of deployment. Since the Navy currently has no deployable field hospitals to provide the required combat medical support for the Fleet and the Fleet Marine force, it is essential that funds be appropriated in fiscal year 1983 to get this program underway.

As you probably know, the Navy's fiscal year 1982 budget request of $87.8 million for Fleet Hospitals was deleted by the Appropriations Committees in the belief that a more consistent and unified program needed to be developed by the Office of the Secretary of Defense which would address the needs of all services for field hospitals. The Department of Defense has responded to the concerns of the appropriations Committees in this area. One of the criticism of the fiscal year 1982 program was that there was no standardization among the services. In response to this criticism, the Navy and the Air Force have already agreed to standardize ninety percent of the medical equipment in their 500 bed deployable medical facilities, and additional standardization is currently under discussion. Another criticism was related to the Navy's plan to position the field hospitals in Oakland, California and then to airlift them to the "hot spot" after the commencement of hostilities. In response to this criticism, the Navy currently plans to preposition all of the fiscal year 1983 field hospitals afloat. A third criticism was that there appeared to be little or no comprehensive planning for the use of existing facilities that could be converted into hospitals. In response to this criticism, the Navy is currently evaluating friendly host nation hospital sites identified by theater commanders, but it should be remembered that the RDF area of operations typically would limit the use of existing facilities.

CIVIL ENGINEERING SUPPORT EQUIPMENT

The fifth general program area is Civil Engineering Support Equipment (exclusive of Amphibious and Specialized Equipment which is being briefed to the Subcommittee on Seapower and Force Structure). $93.5 million is requested for Civil Engineering Support Equipment, an increase of $10.8 million over the fiscal year 1982 budget of $82.7 million. Included within this request are such items as passenger carrying vehicles; trucks; trailers; crushing, mixing, batching, and paving equipment; earth moving equipment; lighting and power generating equipment; fire fighting equipment; weight handling equipment; telephone equipment; combat construction support equipment; and pollution control equipment. These items are being procured in support of both the Operating Forces and the Shore Establishment. The fiscal year 1983 budget was planned to be the eighth increment of a program designed to reduce substantial over-age inventories of rolling stock while maintaining a replacement program which will avoid block obsolescence. Due to funding constraints in fiscal year 1983, however, the truck over-age position will actually increase from 9,972 units (30 percent) at the end of the fiscal year 1982 funded delivery period to 13,071 units (39 percent) at the end of the fiscal year 1983 funded delivery period. We continue to slip away from our goal of reducing the over-age posture of our rolling stock from 40 percent to 15 percent over a 10-per year period.

SUPPLY SUPPORT EQUIPMENT

The sixth general program area is Supply Support Equipment. $70.8 million is requested in fiscal year 1983, an increase of $6.9 million over the fiscal year 1982 budget of $63.9 million. The two most significant items included within this request are Forklift Trucks ($24.1 million) and Automated Materials Handling Systems ($24.4 million). The fiscal year 1983 budget was planned to be the eighth increment of a program designed to reduce substantial over-age inventories of forklift trucks while maintaining a replacement program which will avoid block obsolescence. The Navy's goal had been to reduce the forklift truck over-age inventory to 20 percent for shore activities and to zero percent for forces afloat by the end of the fiscal year 1985 funded delivery period. Due to funding constraints in fiscal year 1983, however, the forklift truck over-age replacement program has had to be extended through fiscal year 1989. The fiscal year 1983 funding will reduce the forklift truck over-age position from 39 percent for shore activities and 12 percent for forces afloat at the end of the fiscal year 1982 funded delivery period to 32 percent for shore activities and 9 percent for forces afloat at the end of the fiscal year 1983 funded delivery period. Also included in the fiscal year 1983 request is $24.4 million to procure Automated Materials Handling Systems. The principal system being procured in this line item is the Navy Integrated Storage, Tracking, and Retrieval System (NISTARS). NISTARS projects will provide complete automation of warehouse functions at Naval Supply Centers. Each project will replace current labor-intensive manual operations with state-of-the-art mechanized material handling systems and thus contribute to the improvement of Navy readiness by providing timely response to customer demand for material to support fleet aircraft and ships. The system will utilize dedicated process controllers, remote terminals, micro-processor controlled material handling equipment (such as wire guided vehicles, pallet handling and bin handling stacker cranes, conveyors, and sorting equipment), storage aids (such as bins, racks, and carousels), and necessary supplementary material handling equipment. The fiscal year 1983 budget provides for the procurement of a NISTARS for Naval Supply Center, Jacksonville. Systems for Oakland, Norfolk, and San Diego were procured with fiscal year 1980, fiscal year 1981, and fiscal year 1982 funds, respectively.

TRAINING DEVICES

The seventh general program area is Training Devices. $53.7 million is requested in fiscal year 1983, an increase of $8.2 million over the fiscal year 1982 budget of $45.5 million. This amount includes $15.5 million in support of submarine training devices and $38.2 million in support of surface ship training devices. These funds are for the procurement of equipment in support of the Navy's education and training mission related primarily to the active surface and subsurface fleet. The Navy continues to utilize simulator techniques in the training of military personnel when it is cost effective and where it clearly strengthens military readiness. The primary objective in the Navy's simulation training programs is to provide training devices which are compatible with present systems and to provide a level of simulation complexity equivalent to the tactical environment. The two largest items in the budget request for Training Devices are $18.1 million for two Perry Class Pierside Trainers, and $14.1 million for Training Support Equipment. The Perry Class Pierside Trainers will provide pierside training in tactical combat operations for Combat Information Center (CIC) and Sonar Control Room personnel of the FFG-7 class ships, while the Training Support Equipment funding will provide for the procurement of minor training aids and devices and logistic support equipment to support the education and training programs at a number of different schools.

COMMAND SUPPORT EQUIPMENT

The eighth general program area is Command Support Equipment. $103.6 million is requested in fiscal year 1983, an increase of $14.4 million over the fiscal year 1982 budget of $89.2 million. Programs included in this category are Medical Support Equipment ($30.8 million), various productivity programs ($38.1 million), and support for a variety of Navy commands including the operating forces ($34.7 million).

The funding for Medical Support Equipment provides for the procurement of all equipment having a unit cost of $3,000 or more for all Naval activities under the management of the Bureau of Medicine and Surgery. Also included is funding for the replacement of shipboard medical equipment and industrial health equipment. The $38.1 million requested for productivity programs will provide for the following efforts: Manufacturing Technology, the Productivity Investment Fund (PIF), and the Productivity Enhancing Incentive Fund (PEIF). Funds requested for Manufacturing Technology are used to purchase, install, and demonstrate improved general purpose manufacturing equipment, tools, and methods. The objectives of this program are to reduce the cost of in-house industrial operations and to reduce the cost of acquiring military hardware and materials. Projects typically provide a return on investment in savings and cost avoidances of seven to one or better over the five years following funding. The Productivity Investment Fund (PIF) provides for the acquisition of equipment and facilities to improve the productivity of Navy activities. This includes major facilities, equipment or process modernization efforts, as well as efforts to improve the performance of individual jobs, tasks, and operations. The Productivity Enhancing Incentive Fund (PEIF) provides funding for fast payback capital investment proposals. This program allows local commands to take advantage of fast payback opportunities as they arise rather than waiting one year or more for inclusion in the normal budget review process. The objectives of this effort are to increase productivity and to decrease operating costs. The other line items in this general program area provide equipment in support of the Chief of Naval Reserve, the Naval Oceanography Command, the Bureau of Naval Personnel, the Naval Telecommunications Command, the Office of the Chief of Naval Operations, the Office of the Secretary of the Navy, the Naval Investigative Service, and shore activities under the command of the Fleet Commanders-in-Chief.

COMPUTER ACQUISITION PROGRAM

The ninth general program area is the Computer Acquisition Program. $74.7 million is requested in fiscal year 1983, an increase of $21.0 million over the fiscal year 1982 budget of $52.5 million. This program was established several years ago to gain economic advantages through centralized management of general purpose, nontactical automated data processing equipment procurement. The Computer Acquisition Program allows the Navy to realize significant savings through the purchase of leased ADP equipments, to achieve personnel and dollar savings through the conversion of functions from manual to automated processes, and to foster competition in the acquisition of ADP equipment. Significant programs included in the Computer Acquisition Program in fiscal year 1983 are $20.7 million for Personnel Support ADP Equipment, $19.5 million for Shipboard Operational ADP Equipment, and $8.7 million for Supply Support ADP Equipment.

Mr. Chairman, this completes my prepared remarks. I will be happy to take any questions which you might have.

Senator **Humphrey**. Fine, thank you for your statement.

Can you give us some idea of how efficient the procurement process is in this area, has GAO done any kind of critique, General Skibbie?

General **Skibbie**. I do not know of any GAO report on any item in this area. I will give you my opinion.

Senator **Humphrey**. Fine.

General **Skibbie**. In my opinion the procurement process is particularly efficient of the reason that most of the equipment that you see here is commercial equipment.

I went through an analysis of the types of contracts we were using. In fiscal year 1983 we expect to have mostly fixed-price contracts for the OPA3 items. I think that is indicative of the fact that we are on a very effective and efficient procurement basis. I think that follows from the fact that very few of the items are developmental, if you will. Therefore, the risks are known. The risks can be placed upon the free and open market.

OFF-THE-SHELF PURCHASE

Senator HUMPHREY. What percentage of the dollars involved are to purchase off-the-shelf, civilian-type items; is that a large segment?

General SKIBBIE. Almost all of our construction equipment. I would say most of the materials handling equipment, at least more than 50 percent.

Senator HUMPHREY. Captain Hancock, what about the efficiency of the procurement in this area, are there any studies on that, and if not, can you give us your estimation?

General HANCOCK. No, sir, I do not think there have been any GAO studies of the kind you are talking about. If you use first-year obligation as a measure of effectiveness or efficiency in this procurement, in this appropriation, about 75 percent of the requested funds will obligate in the first year.

Not like the Army, we do not buy a lot of commercial equipment directly off the shelf because ours has to be in a maritime environment. So, there is a lot of unique equipment particularly adapted to ship-board environments.

General SKIBBIE. Let us make just one other comment, and that was with regard to the GAO report. There was one GAO report, I believe it was a letter report to Senator Levin. It was on a specific type of procurement for construction equipment for the 18th Airborne Corps which consisted of the 101st Air Mobile Division, and the 82d Airborne Division. They had a particular problem with their construction equipment.

We were attempting to standardize the equipment that was in that airborne corps. Senator Levin was concerned about the means of procurement we were using. We responded to the GAO report and had some negotiations with Senator Levin. I believe we adjudicated the matter. But that was a very narrow portion of our total construction program.

Senator HUMPHREY. Yes, I was more interested in broad studies.

MATERIAL SHORTAGES

You have made the case about the importance to readiness of these kinds of items. Where are the most critical areas in this respect? For instance, I understand we have quite a shortage of trucks.

General SKIBBIE. Certainly, our truck situation is very serious. If we just look at OPA3, I would certainly have to highlight Chemical Defense Equipment as a prime shortage. I would also have to highlight materials handling equipment. I would say generators are short. Of course, as we go through our analysis we will find shortages. I know of only one area in which we have enough equipment to completely outfit our active and reserve components. That would be the 10,000-pound rough terrain forklift.

In almost every other item of equipment, we are short equipment to completely outfit our active and reserve components and provide us with required war reserve.

If I had to prioritize within those shortages, then I would say chemical defense, generators, materials handling equipment, and watercraft would be at the top of the list. I could provide you a more definitized list if you like.

Senator **Humphrey**. Yes, I would. I would like to have that sent to my office.

General **Skibbie**. All right.

[The information follows:]

General **Skibbie**. The list that I will provide now for the record is the Other Support Equipment (OPA 3) (Exhibit 1) shortages. The information format shows the name of the item (Nomen), our current fiscal year 1983 program (Current Program QTY/$M), the assets that we will have on hand after the procurement of the items in the current fiscal year 1983 program (Assets fiscal year 1983 FDP), the requirement which should be filled (Pkg II) to assure adequate equipment is available to support the force thru the 1st [deleted] of hostilities. The overage equipment which should be replaced (Overage) and the recommended additional program that you requested (Addl QTY/$M). But, as you can see, this recommended additional program does not include all shortages but rather shortages that are executable in fiscal year 1983.

[Amounts in millions of dollars]

Nomenclature	Current program		Assets, fiscal year 1983 FDP	PKG II	Overage	Additional	
	Quantity	Amount				Quantity	Amount
M8 alarm	6,062	21.8	31,937	46,046	2,122	14,127	50.7
M3A3 smoke gen	100	.8	100		0	500	3.1
Detector, chemical agent	3,600	12.0				4,782	16.5
Forklift FSL 6,000 lb	18	1.9	108	233	0	20	2.1
Forklift 4,000 lb	0	0	1,103	1,711	647	250	8.4
Forklift 6,000 lb	0	0	896	1,315	618	200	7.8
Forklift 4,000 lb SRT	0	0	1,388	1,513	648	201	3.7
Forklift 10,000 lb RT	211	18.7	1,563	1,785	510	304	28.7
Forklift 6,000 lb RT	109	8.5	1,182	2,230	848	419	31.9
Forklift 4,000 lb elec	0	0	1,206	2,004	31	187	6.1
Forklift 6,000 lb elec	0	0	163	498	6	140	5.4
Forklift 50,000 lb RT	59	20.0	334	404	0	12	4.1
Forklift 4,000 lb RT			1,430	2,122	0	100	7.4
Roller, pneumatic	0	0	208	243	7	35	2.1
Compactor, hi speed	0	0	223	279	6	60	7.6
Tamper, pistol-hammer	0	0	779	1,009	0	230	.7
Generators	4,170	69.4	84,833	132,118	11,767	5,245	58.7
Landing craft utility			55	82	42	4	20.6
B-Delong pier			5	10	0	3	3.8
Large tugboat				28	0	2	26.0
Base level comm	([1])	50.8	([1])	([1])	([1])	([1])	38.2
Boat, bridge erect			487	894		75	15.4
Ribbon BR, int bay			1,157	2,122	118	30	4.1
Ribbon BR, ramp			389	743	21	40	1.7
Ribbon BR, transporter	170	12.8	2,035	3,716	92	122	12.8
Forward area refuel (FARE)	150	1.5	1,286	1,351	819	100	1.0
Tank unit, trailer mounted 600 gal			5,672	8,135		871	1.9
Tanker mooring system			4	6		2	5.6
Pump assembly 350 GPM	223	5.8	1,831	2,148	55	150	3.9
140-ton flatcar	79	11.1	520	765	0	245	25.2
20,000 gal pol tanker			[2] 1,669	[2] 893	[2] 1,071	300	20.6
Firetrucks		8.7					5.4
Field kitchen			1,514	5,764		200	3.7

Nomenclature	Current program		Assets, fiscal year 1983 FDP	PKG II	Overage	Additional	
	Quantity	Amount				Quantity	Amount
Heater duct type 250,000/400,000 Btu			8,624	13,329	157	1,736	7.3

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[1] Not applicable.

[2] Current assets O/H are 10,000 gal tank cars, PKG II requirements are quantities for 20,000-gal tank cars. All assets overage are 10,000-gal tank cars.

Senator HUMPHREY. I do not have time to go back and read these committee hearing records, and I don't know who does read them except maybe historians. But if you will send it to my office, I will have a chance to read it.

General SKIBBIE. I will be happy to do that.

Senator HUMPHREY. I would like to have a comprehensive table or inventory list from the Navy as well to give us some idea of where we are.

Captain HANCOCK. Yes, sir.

[The information follows:]

Captain HANCOCK. The following tables are provided:

Equipment category	Current status		Status at end of fiscal year 1983 funded delivery period		
	Total inventory	Retained overage	Total inventory	Retained overage	Inventory objective
Civil engineering support equipment:					
Passenger carrying vehicles	4,696	1,345	4,699	2,317	4,710
Trucks	32,751	13,560	33,602	13,071	35,456
Trailers	6,686	2,716	6,879	3,719	7,521
Crush, mix, batch, pave equipment	1,025	513	999	482	1,267
Drilling and blasting equipment	1,243	464	1,256	614	1,297
Earth moving equipment	3,991	1,922	4,043	2,365	4,552
Lighting and power generating equipment	1,688	818	2,115	948	2,769
Miscellaneous construction equipment	4,985	2,558	4,852	3,002	5,521
Fire fighting equipment	1,002	571	1,081	581	1,106
Weight handling equipment	1,008	520	989	554	1,244
Amphibious and specialized equipment	164	29	242	23	395
Combat construction support equipment	9,303	1,094	9,898	1,920	16,970
Supply support equipment:					
Forklift trucks	10,982	4,591	10,562	2,747	10,562
Materials handling equipment	3,241	1,071	3,205	1,130	3,205

Senator HUMPHREY. Are any of those items involved in any kind of controversy, that is, cost overruns or performance failures?

General SKIBBIE. I think the only item that I know of that is in our fiscal year 1983 budget request that has been controversial in the past is the combat zone hospital. The Congress was concerned that we were not using a standard DOD shelter. We now are using the standard DOD shelters. So, I think we responded to the desires of the Congress.

As you know, as I mentioned in my discussion, the M9(ACE) will be purchased out of this account. It was funded in 1982. There is no money requested in the fiscal year 1983 budget because of the procurement approach we are taking. That has been a subject of some controversy.

Senator HUMPHREY. What does that mean, will you expand on that? You are not buying any in fiscal year 1983 because you are not satisfied?

General SKIBBIE. No; it is a desire to get to a competitive basis as quickly as possible. This is an item that was designed and developed by the Army through a developmental contractor, in this case Pacific Car Foundry.

We have a design package. We want to prove out the design package to prove that it is truly produceable in a production line. Once we prove out that design package, then we want to procure it competitively.

We are buying a small quantity in fiscal year 1982. The M9 [ACE] will be built during late fiscal year 82 and early fiscal year 83, for testing in fiscal year 83, and be ready to compete in 1984. That is why we are not requesting funds in fiscal year 1983. We call it a "skip year" fiscal year 1983. We think it is good business and it gets us to a competitive environment faster.

Senator HUMPHREY. I see. Captain Hancock?

FLEET HOSPITAL PROGRAM

Captain HANCOCK. The only area of contention I know of, sir, is the fleet hospital program. We had requested funds in fiscal year 1982 to commence that program. Those funds were denied by the House Appropriations Committee and there was an issue of a DOD-coordinated field hospital program. At that time there was an issue of how the Navy would pre-position and utilize these hospitals, and there was an issue on investigating the use of host nation facilities.

We believe that we have solved those problems and that we can get on with the program in fiscal year 1983.

To my knowledge, that is the only program where there is any contention.

Senator HUMPHREY. Is this a vessel, or a portable building, or what?

Captain HANCOCK. It consists of portable tents and shelters. It will be pre-packaged into large containers, put on a container ship and then pre-positioned to the area where it is needed. There is the potential, and we are looking at the ability, to get it there faster via an airlift method.

Senator HUMPHREY. All right. We have a number of questions for each of you, which we will submit in writing. If we may, we would like to have your responses within 15 days.

Thank you very much for your testimony this morning.

General SKIBBIE. Thank you, sir.

Captain HANCOCK. Thank you, sir.

[Questions submitted by Senator Gordon J. Humphrey, answers supplied by Gen. Lawrence F. Skibbie, and Capt. James E. Hancock:]

QUESTIONS SUBMITTED BY SENATOR GORDON J. HUMPHREY

Senator HUMPHREY. How are requirements determined in this area?

ARMY

General **Skibbie**. In general terms, requirements are determined as follows: Analyses of the threat, current technology, and missions of the Army are made. From the results, the Army derives its force structure requirements; that is the type of units and number of personnel we need. We then look at the types of units and determine the equipment required by these units to accomplish their mission. This gives us what we call the initial issue quantity. To this figure we add maintenance float quantitities and the War Reserve requirement which represents the amount of equipment we expect to lose during the early months of battle before our production base can resupply us. All of these requirements, plus some minor contingency requirements on various items, make up the Army Acquisition Objective (AAO) or the total approved Army requirement for a specific piece of equipment. To insure equipment is placed strategically, we identify a category we call POMCUS. We do not program procurements to cover this requirement; however, we do develop our distribution plans to provide for prepositioning of these assets.

NAVY

Captain **Hancock**. In the case of Spares and Repair Parts, General Purpose Electronic Test Equipment (GPETE), Civil Engineering Support Equipment, and Supply Support Equipment, each ship or shore activity has an equipment allowance. The total of the equipment allowances for all ships and shore activities (plus war reserve requirements) constitutes the Navy's inventory objective for a particular item of equipment. Procurement budgets are formulated to achieve the inventory objective after a given number of years, taking into consideration such factors as current inventory status, undelivered items currently under contract, projected consumption rates (in the case of GPETE and spares), and equipment over-age status (in the case of Civil Engineering Support Equipment and Supply Support Equipment).

In the case of Industrial Facilities Support Equipment, Command Support Equipment, and the Computer Acquisition Program, equipment requirements are generated by local activities and reviewed by major claimants for consistency with mission requirements and for compliance with applicable procurement regulations. An economic analysis is often performed to calculate manpower savings associated with the new items of equipment.

Requirements for Training Devices are based on the delivery and installation schedules for weapons systems and other end items for which training is required.

AIR FORCE

Answer. Requirements are determined in the Other Procurement Appropriation by a series of different processes depending upon the commodity. Each of the commodity requirement determination methodologies is based on objectives and criteria established in Defense Guidance. Objectives in the Other Procurement Appropriation include: vehicular equipment—to attain time phased qualitative and quantitative fleet improvements with near term emphasis on direct mission support and readiness; munitions—to improve readiness and sustainability shortfalls in war reserve stockpiles and to provide adequate stocks of munitions to fulfill training requirements; Command, Control and Communications (C^3) Systems—to provide, upgrade and modernize C^3 equipment for surveillance, warning, control and communications in strategic, tactical, and multifaceted environments; Other Base Maintenance and Support Equipment—to provide readiness and wartime sustainability in a wide range of areas such as personal protection, rescue, mobility, aircraft maintenance and wholesale level maintenance and distribution systems. A summary of how Other Procurement Appropriation requirements were determined follows:

Vehicular equipment. Each vehicle requirement represents a validated need based on replacement requirements and shortages in the categories of special purpose, firefighting, material handling, cargo utility, passenger carrying and base maintenance. The total vehicular equipment requirement is $1.2 billion; however, the fiscal year 1983 budget request of $350.4 million continues a phased and prudent program to improve the fleet while emphasizing direct mission support. The fiscal year 1983 program is part of a sustained improvement effort to resolve vehicle deficiencies over the five year defense plan. Overall, the program counters 45 percent of current vehicle authorizations which are either unfilled or filled with assets which exceed replacement criteria.

Munitions. Requirements reflect Defense Guidance and the need to modernize our stockpiles with a balance of new technology and maintenance of a suitable production level. War Reserve Material (WRM) munition requirements for the air-to-surface portion of the tactical force were determined by analysis of: aircraft and munition effectiveness versus target array for various delivery conditions; expected attrition rates for each aircraft; munition, target and delivery condition based on enroute and target area defense arrays; the preferred munition for each aircraft, delivery condition, and target combination using the OSD criteria of least-cost-per-effective-target-kill; and threat-oriented, optimal sortie allocations designating a simultaneous attack by the available air-to-surface sorties against the theater target quantities, as prioritized by the Theater Commander. Munitions for Strategic Air Command, Special Operations Forces, Search and Rescue, Alaskan Air Command, Southern Command, and those elements of the tactical fighter force (chaff, mines, flares, 2.75 rockets, 20mm, 30mm) are determined by expenditure per sortie factors. Munitions training requirements reflect the difference between on hand inventories and requirements to train aircrews, security police and others and to perform munitions maintenance.

C^3 Systems. Requirements are based on analyses of current C^3 capabilities required to support Defense Guidance against a projected threat. This program concentrates on providing rapid, accurate and reliable information to national command authorities and military commanders by modernizing strategic defense and command and control systems and exploiting space technology. It covers other ground applications to provide modern, interoperable, jam resistant and securable C^3 equipment for the tactical environment. Also included are enhancements to defense-wide communications systems, base telecommunications, and associated training and logistic support. Requirements replace equipment which has been operating since the 1950s, provide jam free communications, exploit space systems and technology, provide better decision-making interfaces and communications, and increase C^3 productivity. The fiscal year 1983 program continues the modernization program with systems either coming out of development or with those production items available off-the-shelf.

Other Base Maintenance and Support Equipment. This area covers a wide variety of equipment that supports peacetime readiness and deployed sustainability in wartime. It encompasses a range of resources that include personal protective equipment, sophisticated test equipment, mobile electric power generators, depot and distribution support items and a myriad of equipment in support of deployed operations. The majority of the Other Base Maintenance and Support Equipment requirements are determined through an automated computation system. This system bases the annual procurement requirement on authenticated equipment authorizations in Air Force tables of allowance. These authorizations are the approved equipment allowance required by organizations to perform the assigned missions. The computation includes additional factors such as bailments, new unit or mission activations, and replacement factors based upon equipment age and established wear out factors. The resultant net procurement quantity is a total Air Force requirement that includes the Air Force Reserve and Air National Guard. When available funding does not match the required procurement program, procurement is phased and balanced to eliminate equipment shortages and secondly to modernize equipment. Our goal is to achieve an optimum program that maximizes the budget activities contribution to the readiness and sustainability of Air Force combat units. New requirements such as mobility support equipment were determined by indepth analysis of aircraft and base maintenance and housekeeping needs at planned beddown locations, assessment of host nation support capabilities, evaluation of beddown base vulnerabilities, and applicability of in-use and available equipment to meet climatic requirements. The mobility support equipment line has, therefore, been tailored to each deploying squadron equivalent and beddown base using tested DOD standard families of items.

Once functional requirement are identified, they undergo intense review by the Air Staff and field commands to assure they match Defense Guidance and provide an optimum balanced program for attaining Air Force goals.

COMPARING 1983 BUDGET WITH PREVIOUS YEARS

Senator **Humphrey.** How does the fiscal year 1983 budget compare to previous years? At the present time, is the level of effort in this area more tied to modernization, force structure or budget constraints?

ARMY

General **Skibbie.** The fiscal year 1983 Other Procurement, Army (OPA) support equipment budget request, although $174 million less than fiscal year 1982, is designed to provide a delicate balance to the rest of the combat force. A large part of the fiscal year 1982 program was a result of the fiscal year 1982 Amendment which included initiativies to replace over-age construction equipment, fill some equipment shortages in POMCUS and higher priority units, and improve our chemical defensive equipment posture. In fiscal year 1983 we insure that the initiatives which began in fiscal year 1982 are carried forward to the maximum extent possible in multi-year contracts to obtain the efficiencies derived from these contracts. The overall Army acquisition program is tied 100 percent to budget constraints and is delicately balanced. The lion's share, or 75 percent of our fiscal year 1983 budget request for OPA3, is required to fill existing equipment shortages. Therefore, only about 25 percent of our budget request is earmarked for modernization.

NAVY

Captain Hancock. The fiscal year 1983 Other Procurement, Navy budget request is $3,970.2 million, an increase of $293.6 million over the revised fiscal year 1982 program of $3,676.6 million. $187.5 million of the $293.6 million is related to inflation, while $106.1 million constitutes real program growth in fiscal year 1983 dollars. The total funding level for this appropriation seeks to strike a balance between readiness and modernization, both of which are related to force structure.

AIR FORCE

Answer. A comparison of the fiscal year 1981, 1982 and 1983 budget programs within the Other Procurement, Air Force (OPAF) Appropriation follows. For clarity, the clasified programs included within OPAF are shown separately.

[In millions of dollares]

	Fiscal year—		
	1981	1982	1983
Munitions and associated equipment	344	1,081	854
Vehicular equipment	158	331	350
Electronics and telecomm equipment	709	1,105	1,427
Other base maintenance and support equipment	236	406	464
Classified	1,701	2,448	2,750
Total	3,148	5,406	5,845

The four budget activities in the OPAF Appropriation are driven to some degree by a combination of modernization, force structure and budget constraints. All budget activity programs are impacted by the availability of resources; however, the financial programs are considered to be prudent and well balanced levels of capability within these budgetary constraints. The Munitions and Associated budget activity is mainly tied to force structure and the need to modernize the Viet Nam era inventory of conventional munitions. The fiscal year 1983 request is based upon the needs for training ammunition and funding to build war reserve material (WRM) stocks. Fiscal year 1982 requirements for training munitions were larger than normal due to the low inventory of stocks resulting from several years of less than needed funding. With the priority emphasis we placed on rebuilding munition stock levels in the fiscal year 1981 and 1982 budgets, our pipeline training stocks are sufficiently improved so that the fiscal year 1983 request reflects only the annual requirement for consumption. In addition, the WRM procurements are smaller in fiscal year 1983 as compared to fiscal year 1982 because we have reached the Defense Guidance short term procurement objectives for some large procurement items (Rockeye and 30mm) and newer munitions will not enter full rate production until fiscal year 1984 or later.

The Vehicular Equipment budget activity is tied to the force structure but primarily involves the modernization of a vehicle fleet that is overdue replacement. The increase from fiscal year 1981 to fiscal year 1982 represents the Air Force's resolve to modernize its fleet as well as procure vehicles to support the administration's commitment for rapid deployment to Southwest Asia. It also includes a program to preposition flightline support vehicles in the European theater to support deploying forces. The fiscal year 1983 request continues to reflect our fleet modernization efforts, Southwest Asia and European initiatives, and includes initial procurements to support new weapons entering the inventory such as the Ground Launched Cruise Missile.

The Electronics and Telecommunications budget activity is primarily driven by the need for state-of-the-art command, control and communications systems to replace an obsolete and difficult to support inventory. Increases address such new equippage as combat communications needs in support of the Rapid Deployment Joint Task Force, replacement of the Alaskan early warning radars with minimally attended radars, and the Joint Tactical Information Distribution System. The fiscal year 1983 request continues modernization efforts and includes replacement of the Distant Early Warning Line radars, a Southeastern PAVE PAWS site and continues the anti-jam communications program.

The Other Base Maintenance and Support Equipment budget activity is driven by force size; however, the procurement requirement consists primarily of a modernization effort to replace an obsolete and costly to maintain inventory. The fiscal year 1981 to fiscal year 1982 increase is directly related to the procurement of mobility support equipment in support of the Rapid Deployment Joint Task Force. It also consists of common support equipment for prepositioning in the European theater to support deploying combat forces. The fiscal year 1983 program continues these initiatives and includes additional funding for chemical/biological defense equipment.

OUTSTANDING REQUIREMENTS IN OTHER PROCUREMENTS

Senator **HUMPHREY**. What are your outstanding requirements in Other Procurement?

ARMY

General **SKIBBIE**. Those are the same items that I have provided to you earlier in the testimony.

NAVY

Captain **HANCOCK**. The only significant shortfalls in the nine general program areas included in today's presentation are in Civil Engineering Support Equipment and Supply Support Equipment. The shortfalls in both of these areas relate to the fact that substantial portions of our inventories of rolling stock are overage.

AIR FORCE

ANSWER. The Munitions and Associated Equipment budget activity has a shortfall of several billion dollars; however, our request represents a prudent, economic and produceable program that we believe best addresses this shortfall.

The fiscal year 1983 Vehicular Equipment budget request is $350.4 million against a requirement in excess of $1.2 billion, leaving outstanding requirements of approximately $850 million. The shortfall spans all six budget categories. Our fiscal year 1983 budget request is, we feel, a fiscally prudent approach. Our Five Year Defense Program (FYDP) dedicates resources to the Vehicle Program to completely fund the outstanding requirement at the end of the fiscal year 1987 funded delivery period.

The Electronics and Telecommunications Procurement Program provides Communications-Electronics equipment ranging in size and cost from small hand-held radios ($4,000) to large strategic defense surveillance radars ($200 million). Fiscal year 1981 and 1982 funds have initiated several long-awaited replacement, modernization, and upgrade programs in the strategic, tactical, and defense-wide communications, command, and control (C^3) areas. Due to fiscal constraints, several of these more expensive procurement programs have been stretched over several years. Examples of these programs are: replacement of the Distant Early Warning Radar System; acquisition of a Southwest Submarine Launched Ballistic Missile Radar (PAVE PAWS); upgrades to Ballistic Missile Early Warning System tracking radars; upgrades to existing PAVE PAWS sites; replacement of logistically difficult and obsolete tactical radios, switching equipment, and message processing equipment; upgrade of Cheyenne Mountain Complex computers; replacement of outdated automatic data processing equipment; electronic countermeasure systems; and threat simulator aircrew training equipment.

The unfunded requirements in the Other Base Maintenance and Support Equipment Program (excluding the classified projects) total $158 million in fiscal year 1983. A $53 million shortage exists in common electronic test equipment, precision measurement equipment and calibration standards. Personal safety and rescue equipment has a $5 million shortfall. Mechanized material handling systems (MMHS) at air logistics centers and base level supply, air terminal MMHS, and base level industrial plant equipment requirements are short by $35 million. We are $18 million short in electrical generators and associated power production equipment, as well as tactical shelters, refueling bladders, and spares. Additionally, we have $47 million in unfunded requirement for base level support such as real property maintenance equipment, vehicle maintenance equipment and administrative support equipment.

EFFECT OF OTHER PROCUREMENTS ON READINESS AND SUSTAINABILITY

Senator **Humphrey**. What effect do Other Procurement accounts have on readiness and sustainability?

ARMY

General **Skibbie**. In reference to Other Support Equipment (Other Procurement, Army (OPA 3), I cannot over emphasize the Sinews of Support which I discussed in my briefing previously. The functional areas of ammunition, fuel, repair parts, casualties and evacuation, supply and service, engineer, and transportation are essential to the readiness and sustainability of the combat force. OPA 3 either procures the equipment to support these functions or the function is dependent in a specific way on OPA 3 support equipment.

NAVY

Captain **Hancock**. Of the nine general program areas discussed in todays presentation, seven (Industrial Facilities, Spares and Repair Parts, General Purpose Electronic Test Equipment, Fleet Hospitals, Civil Engineering Support Equipment, Supply Support Equipment, and Training Devices) contribute directly to fleet readiness, while the other two (Command Support Equipment and the Computer Acquisition Program) contribute to overall Navy readiness in a more indirect sense. Another general program area, not included in today's presentation, which contributes directly to readiness and combat sustainability in Expendable Ordnance ($590.2 million in fiscal year 1983).

AIR FORCE

Answer. The Other Procurement Appropriation budget activities all have a direct or indirect impact on readiness and sustainability of our combat forces. For example, the Munitions and Associated Equipment Program is a keystsone of the Air Force commitment to increase the overall readiness and sustainability of our combat forces. The present woefully deficient inventory of war reserve stocks will be significantly enhanced by the rapid prudent procurement of munitions to sustain our tactical forces in combat. Modern, effective weapons are critical to meeting current and near-term threats to our national security. The requirement for sustaining stocks of modern war reserve munitions and the training munitions necessary to develop and maintain the proficient capability to employ these weapons and their delivery systems is paramount to a viable ready force.

Likewise, the vehicular equipment budget program procures equipment directly affecting mission readiness. Examples include vehicles that support aircraft launch and recovery such as refueling trucks, tractors for towing aircraft and flightline support equipment, material handling equipment for loading and off-loading aircraft, and crash fire vehicles for aircraft protection. In addition, vehicles are procured to equip Rapid Runway Repair teams for the mission of repairing runways after enemy attack.

The Electronics and Telecommunications budget activity also impacts the readiness and operation of our strategic and tactical forces. Strategic defense surveillance radars operating around the clock seven days per week provide immediate warning of enemy missile, aircraft, and spacecraft activity. Command and control communications systems provide National Command Authorities and key military decision makers information essential to the timely direction of strategic and tactical forces. Tactical Comunications units equipped with modern communications-electronics systems maintain a combat ready posture and when deployed are able to conduct rapid reaction tactical air control operations for extended periods of time. Spare and repair parts procurements further insure sustaining support of these systems.

The vast majority of items procured in the Other Base Maintenance and Support Equipment Program (excluding the classified projects) directly support the combat readiness and sustainability of our weapon systems. The electronic test equipment, precision measurement equipment, and calibration standards are essential for the maintenance and calibration of electronic and avionics systems. Personal safety and rescue equipment is essential for protection of our combat crews and maintenance/fire fighting personnel. Mobile electric generators provide the electrical power to operate in a deployed environment. Air cargo pallets/nets and mobility bins provide environment. Air cargo pallets/nets and mobility bins provide the capability to rapidly load/offload intra- and inter-theater airlift in peacetime as well as contingency operations. Mobility equipment provides the capability to maintain aircraft and provide billeting, messing and sanitation facilities for personnel deployed in a bare base environment or in support of worldwide force projection contingencies.

Senator **Humphrey**. What items contribute most to the readiness and combat sustainability of major end items such as combat vehicles, aircraft and ships?

ARMY

General **Skibbie**. Five of the six catgegories which I discussed in my briefing directly impact readiness. The sixth category (Other Support Equipment) which provides funding for non-system training devices, the National Training Center as well as other items support readiness both directly and indirectly. The five categories that directly impact readiness are as follows:

Engineer and Support Equipment.—Construction equipment supports airfield and aircraft landing zone construction while Mine/Countermine and Bridging equipment contribute directly to the offensive and defensive capability of the force. Power generation equipment supplies the necessary tactical power to many of our weapon systems as well as our Communications, Command and Control Equipment.

Supply Support Equipment.—Provides the essential fuel, water and defensive chemical equipment in addition to the materiel handling equipment which is essential to the movement of ammunition as well as other critical supplies.

Transportation Support Equipment.—Sustains the combat force through movement of this force and its supply support utilizing both rail equipment and watercraft in a Logistics-Over-The-Shore (LOTS) scenario.

Maintenance Support Equipment.—Supplies the major repair parts for OPA 3 equipment plus the shop sets used in conducting maintenance operations in support of our combat forces.

Medical Support Equipment.—Provides the tactical hospital equipment as well as equipment for our fixed hospitals which support the readiness of our personnel.

Over 95 percent of the OPA 3 budget directly affects readiness and sustainability while the last 5 percent indirectly affects readiness.

NAVY

Captain **Hancock**. Spares and Repair Parts and General Purpose Electronic Test Equipment both contribute directly to the readiness of major end items such as weapons systems, sensor systems, and other ship systems.

AIR FORCE

Answer. Each of the budget activities in the Other Procurement, Air Force Appropriation directly or indirectly contributes to the readiness and sustainability of Air Force combat units.

The Munitions and Associated Equipment Program is a keystone of the Air Force effort to increase the readiness of our combat force from the low levels of the recent past and provide for the most rapid yet prudent growth of our WRM stockpile. These stockpiles are needed to sustain our tactical forces in combat with the modern effective weapons necessary to meet current and near-term future threats.

Within the Vehicular Equipment budget, the items relating most directly to readiness and combat sustainability are aircraft refuelers and tow tractors, material handling equipment, and rapid runway repair equipment.

Similarly the Command and Control Communications Systems procured in the Electronics and Telecommunications budget activity are essential for the warning capability and timely direction of strategic and tactical forces. Combat operations could not be conducted or sustained without the wide variety of equipment procured in this budget activity.

The Other Base Maintenance and Support Equipment budget activity (excluding classified projects) provides for common base level support equipment to maintain the combat readiness of our weapon systems. Included are personal safety and rescue equipment utilized by combat crews and support personnel. Also, mobility equipment needed to maintain aircraft and provide billeting, messing and sanitation facilities for personnel in a deployed bare base environment is included in the request.

CONTROVERSIAL ITEMS TO CONGRESS

Senator **Humphrey**. What items have been controversial in the Congress? What is the appropriation track record in this account?

ARMY

General **Skibbie**. On numerous occasions, members of Congress have expressed a genuine concern over budget requests for major non-medical equipment identified as MUST components. As a result, funds to acquire this materiel were denied for fiscal years 1979, 1980, and 1981. During fiscal year 1982 DOD Medical Activities Hearings, the Army's Surgeon General advised the Congress that: The MUST Program has been terminated; no additional Utility Elements (U-Packs), Expandable, Multipurpose or Inflatable Shelters developed under the MUST Program will be procured; and requirements for this type of equipment to support the DA approved additional combat zone hospitals will be met by use of the DOD Standard Electrical Generator/Environmental Control System (EG/ECS), Tactical Shelter (ISO-Rigid Wall) and Tent, Extendable, Modular, Personnel (TEMPER).

Our fiscal year 1983 budget request implements this plan. Use of this equipment will standardize these external components for all services.

Funds have been programed to establish a smooth transition to these new items. As a practical measure, we will continue to use all residual assets from the MUST program until these assets are no longer serviceable. The need to fully equip today's force and improve medical readiness posture cannot be deferred.

NAVY

Captain **Hancock**. The only two line items which were deleted in there entirety by the Congress in fiscal year 1982 were the Fleet Hospital Program ($87.8 million) and the Productivity Enhancing Incentive Fund ($3.3 million). Adjustments to a number of other programs resulted in a net reduction of $22.1 million. The total reduction to the fiscal year 1982 Other Procurement, Navy appropriation request of $3,822.0 million was $113.2 million (3.0 percent). The total reduction to the fiscal year 1981 Other Procurement, Navy appropriation request of $3,055.5 million was $17.9 million (0.6 percent).

AIR FORCE

Answer. The past three years track record for the Appropriation is provided in the following chart. Although the Appropriation has experienced modest reductions, for a variety of reasons, three programs have been the subject of controversy. These are:

The FMU-112 fuze funding included in the Munitions and Associated Equipment budget activity has been denied the past two years. The House Appropriations Committee directed the Air Force to wait and procure the FMU-139 fuze (under development by the Navy) when it becomes available instead of the currently available FMU-112 fuze. The Air Force fiscal year 1983 request for electronic fuzes is structured to respond to Congressional intent. If the FMU-139 is ready, the Air Force will procure it. We are requesting authority, however, to procure FMU-112's if the FMU-139 fuze is not available in fiscal year 1983. This will minimize the reduction in munitions effectiveness if the FMU-139 development program slips. Although this approach is not ideal, it does begin upgrading our unreliable fuze inventory regardless of any slip in the FMU-139 development program. It will also maintain the option to expand fiscal year 1983 fuze production and continue to produce FMU-112 fuzes in the outyears if the FMU-139 program experiences major problems.

Another controversial issue is the European Vehicle Buy Program wherein we procure European vehicles from manufacturers in the Federal Republic of Germany, the United Kingdom, and Italy for use by our forces in those countries. Although the Congress did not reduce the vehicular equipment budget for European Vehicles in fiscal year 1982, the appropriation language prohibits foreign procurement of administrative use vehicles except in contracts for less than $50,000. The Air Force Fiscal Year 1982 Vehicular program contains requirements for 1,029 European procured vehicles and the fiscal year 1983 budget request includes 1,190. Language seeking to repeal Section 783 of Public Law 97-114 which restricted foreign vehicle procurements has been included in the fiscal year 1982 Supplemental budget request.

Prior to fiscal year 1982 the Base Procured Equipment program in the Other Base Maintenance and Support Equipment budget activity was controversial with the House Appropriations Committee (HAC). The HAC had been reluctant to appropriate requested funds. Congressional language indicates a belief that this equipment is of a lower priority than other national defense needs. As a result, we have been reluctant to risk Air Force obligation authority to increase funding (even though the program is less than 50 percent funded). This program provides funds for the local purchase of investment equipment with a unit cost of $3,000 or more for all Air Force organizations including the Air Force Reserve and Air National Guard. Equipment includes real property maintenance equipment, replacement real property maintenance equipment, replacement real property installed equipment, dining hall equipment, vehicle maintenance equipment, and administrative support equipment. The $32 million requested in fiscal year 1983 will leave an unfunded deficit of $47 million.

OTHER PROCUREMENT, AIR FORCE

[In millions of dollars]

	Fiscal year 1980		Fiscal year 1981		Fiscal year 1982	
	Request	Appropriation	Request	Appropriation	Request	Appropriation
Munitions and associated equipment	335	331	302	293	1,114	1,088
Vehicular equipment	157	157	162	162	335	333
Electronics and telecommunications equipment	619	610	723	696	1,121	1,112
Other base maintenance and support equipment	192	188	243	238	419	409
Classified projects	1,367	1,369	1,603	1,620	2,186	2,423
Total	2,670	2,655	3,033	2,999	5,175	5,365

Senator **Humphrey**. The subcommittee is adjourned.

[Whereupon, at 10:40 a.m., the subcommittee adjourned, to reconvene subject to the call of the Chair.]

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1983

THURSDAY, MARCH 18, 1982

U.S. SENATE,
SUBCOMMITTEE ON PREPAREDNESS,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

OPERATION AND MAINTENANCE, DEFENSE AGENCIES

The subcommittee met in open session pursuant to notice at 10:05 a.m. in room 224, Russell Senate Office Building, Senator Gordon J. Humphrey (chairman), presiding.

Present: Senators Humphrey and Levin.

Staff present: David S. Lyles and José E. Martinez, professional staff members; and Carol J. Rudolph, staff assistant.

Also present: George Kohl, assistant to Senator Humphrey.

OPENING STATEMENT BY SENATOR GORDON J. HUMPHREY, CHAIRMAN

Senator HUMPHREY. Good morning. The subcommittee meets today to receive testimony on the fiscal year 1983 "Operations and Maintenance" requests for the Defense agencies and Defense-wide activities.

We are pleased to have with us Mr. L. Paul Dube, Acting Director Operations in the Office of the Assistant Secretary of Defense, Comptroller; Brig. Gen. C. F. Drenz, Deputy Director, Defense Logistics Agency; and Brig. Gen. Harry D. Penzler, Deputy Director for Operations, Office of the Joint Chiefs of Staff. Also present is Mr. William J. Cassell, Comptroller, Defense Logistics Agency.

The Defense Agencies and Defense-wide activities account includes a range of programs within the Department of Defense with which the subcommittee is not adequately familiar. The purpose of this hearing is to gain a broader understanding of the extent to which vital missions are supported outside the service departments.

Because of the number of separate agencies, we are unable to receive testimony from each one, nevertheless, the subcommittee intends to establish a rotation in which a given agency would appear at least once in a 3-year cycle.

Our interest in the Defense Logistics Agency is a result of its size and its contribution to the material readiness of our forces. Of particular interest in fiscal year 1983, however, are the manpower and accounting changes that will result from DOD's proposed consolidation of consumable items under DLA. This is a controversial proposal which the entire Armed Forces Committee must study in more detail.

Finally, the subcommittee's interest in the Joint Chiefs of Staff exercise program is the result of congressionally-mandated changes in the organization and accounting for this area.

In addition to assessing the exercise program, we must also gain a better understanding of the nature and purpose of the so-called "CINC Readiness Fund" for which $100 million has been requested in the fiscal year 1983 budget.

Mr. Dube, will you lead off?

STATEMENT OF L. PAUL DUBE, ACTING DIRECTOR FOR OPERATIONS OFFICE OF ASSISTANT SECRETARY OF DEFENSE (PROGRAM/BUDGET) OFFICE OF ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

Mr. **Dube**. Mr. Chairman, I have a written statement which I propose to insert in the record. I will not read it unless you prefer.

Senator **Humphrey**. Fine.

Mr. **Dube**. My purpose this morning is to give you an overview of the Operation and Maintenance Defense Agencies and other Defense-wide activities.

The diversity of the functions and organizations supported in this account makes it impossible for me to have at my command all of the details you might be interested in today or to deal at an expert level with the programs and issues that are inherent in all of these programs.

I would like to assure the committee that we can provide the committee the details as they are requested by the staff and can make experts available on any of the issue areas that I can't answer adequately.

Senator **Humphrey**. Fine.

Mr. **Dube**. I would like to start by putting the request in perspective of the total defense budget and point out a couple of relationships supporting the material provided in the authorization and appropriation request.

I would like to call your attention to the first table in my statement. There we display the total O. & M. request, of which the DOD-wide activities is about 8.5 percent or $5.9 billion.

What I would like to call your attention to is the fact that of the total defense budget of $258 billion for 1983, $74.4 billion is for "Title III, Operation and Maintenance", yet the authorization request that we have submitted and all of the details in the justification books will support a figure of $69.4 billion.

The difference is that the authorization request does not include the cost associated with the forthcoming October civilian pay raise, nor does it include the cost of legislation to be proposed for a CHAMPUS dental program. Those amounts are included in the overall defense budget totals but not in the appropriation or authorization request transmitted in February. They will be the subject of later supplementals.

1981 PAY RAISE

As a departure from our normal practice, the fiscal year 1982 numbers that you are looking at do not include the October 1, 1981, pay raise. Normally, we would have those in these accounts by this time, but the decision to withhold transmittal of the pay supplemental Government-wide caused us to display it in this manner.

Senator HUMPHREY. All right.

Mr. DUBE. I should like to talk first about one appropriation included in the account and that is the "Claims, Defense" appropriation, where we are requesting $172.5 million to pay for various categories of claims. The two major categories are "Personnel Claims" and "Tort Liability Claims", the bulk of which relate to maneuver damages in Europe. We have relatively little control over those costs and estimate them based on prior experience.

In O. & M. Defense Agencies the increase that we are requesting is $696 million, of which $287 million is for cost increases including $140 million for the pay-raise cost in 1983 of this year's raise and $409 million in real program growth.

That real program growth is an increase of about 8.0 percent, and that includes the full $100 million for the CINC Readiness Fund.

Exclusive of that, in all of the other accounts, the total real growth is about 6.0 percent, which is slightly below the O. & M. total real growth of about 6.2 percent and substantially below the total defense budget real growth of about 13 percent.

Senator HUMPHREY. Before you go on, will you put things in sharper focus for me? Do you plan to discuss the "Operation and Maintenance, Defense Agencies Claims"?

Mr. DUBE. Right.

Senator HUMPHREY. What does that mean?

Mr. DUBE. Claims?

Senator HUMPHREY. Is that one category?

Mr. DUBE. No. Within this category of O. & M. DOD-wide activities we have three appropriations—"O. & M. Defense Agencies" is an appropriation; "Claims, Defense" is another appropriation; and the third appropriation is the "Court of Military Appeals."

Senator HUMPHREY. What are you discussing today?

Mr. DUBE. The O. & M., Defense Agencies appropriation" and "Claims, Defense."

Senator HUMPHREY. Now, what are those items?

Mr. DUBE. There are two major categories in "Claims, Defense." One is "Personnel Claims", which are reimbursements to military members for damage done to personal property. It is primarily household goods damaged in the course of a permanent change-of-station move.

TORT LIABILITY CLAIMS

The second major category is "Tort Liability Claims".

Senator HUMPHREY. Thank you. I was trying to get some of these terms straight that you are using.

What was the first category before you get to "Claims, Defense"?

Mr. DUBE. "Operation and Maintenance, Defense Agencies."

Senator HUMPHREY. What comes under that?

Mr. **Dube**. That is the account that finances all of the activities that are consolidated Defense activities, the Office of the Secretary of Defense, and the Joint Chiefs of Staff.

The next page of my statement has a listing of the individual organizations and programs that are financed there.

Senator **Humphrey**. Where is that?

Mr. **Dube**. What I have done on this chart is to identify the various programs that are supported in the Operation and Maintenance Defense Agencies account and array them in categories that are somewhat similar in terms of the nature of the operation.

Senator **Humphrey**. Which chart are you talking about?

Mr. **Dube**. The last page of my statement.

The total 1983 request is $5.755 million for the programs and organizations shown on this chart.

As you can see, there are a number of very different types of organizations and programs supported here, but five major groupings, I believe, adequately display the various programs.

A number of these programs are directly related to supporting our military people. Out of this appropriation we operate the Overseas Dependents' Schools and Section 6 Schools for which we assumed responsibility for financing in 1982.

CHAMPUS PROGRAM

Another major program of significant importance to military people is the CHAMPUS program, where we finance dependent or retired personnel medical costs. The Health University is in here and a couple of smaller programs.

Under "Technical Support," there are a number of very technical activities supported in this appropriation—Defense Mapping Agency, Defense Nuclear Agency and "Intelligence and Communications," including the Defense Intelligence Agency, and the National Security Agency.

In some of these agencies it is sometimes easy to lose sight of the directness of the relationship between the work they do and the operation of our forces and the effectiveness of weapons systems.

An example is the Defense Mapping Agency, which produces a great deal of material that is absolutely crucial to the effective utilization of a number of weapon systems like the cruise missile, which is very dependent upon accurate topographical data in order to meet its objectives.

The logistics support will be discussed by the Defense Logistics Agency representatives.

Then there are a number of management support programs that are involved here. The Office of the Secretary of Defense, and the Washington Headquarters Services are included as well as the Defense Audit Service and the Defense Contract Audit Agency—the latter two agencies obviously have a bigger job to do now with the increases in the defense program. There is a need to increase resources, both people and dollars, in these areas in order to effectively cover the contractual aspects of the larger procurement programs.

General Penzler will be discussing the organization of the Joint Chiefs of Staff and the programs that are supported with their organization.

Those are the major categories of costs that are incurred in this appropriation.

[The prepared statement of Mr. Dube follows:]

Prepared Statement of Mr. L. Paul Dube, Acting Director for Operations, Office of Assistant Secretary of Defense (Program/Budget), Office of Assistant Secretary of Defense (Comptroller)

Mr. Chairman and Members of the Committee: I am pleased to have the opportunity to appear before you to present the fiscal year 1983 "Operation and Maintenance" request for DOD-wide activities. I will be followed by Brig. Gen. C. F. Drenz, the Deputy Director (Acquisition Management) for the Defense Logistics Agency, who will discuss the DLA's Operation and Maintenance budget. Brig. Gen. H. D. Penzler, Director of Strategic and General Operations, Organization of the Joint Chiefs of Staff, will then present the JCS exercise program.

I would like to put the Defense-wide O. & M. request in the context of the total Defense Budget for fiscal year 1983. Defense-wide activities account for approximately 8.5 percent of the total operation and maintenance budget in fiscal year 1983, as shown in Table 1.

TABLE 1.—OPERATION AND MAINTENANCE, TITLE III

[Dollars in millions]

	Fiscal year—			Percent of fiscal year 1983 total
	1981	1982	1983	
Army	$14.4	$17.1	$18.6	26.8
Navy/Marine Corps	19.5	21.4	24.4	35.2
Air Force	16.9	18.4	20.5	29.5
DOD wide activities	4.5	5.2	5.9	8.5
Total	55.3	62.1	69.4	100.0
Pay raise Oct. 1, 1981		.9		
Pay riase Oct. 1, 1982			.9	
Legislative contingency			.1	
Total O. & M.	55.3	63.0	70.4	

DEFENSE WIDE ACTIVITIES

[In thousands of dollars]

	Fiscal year—		
	1981	1982	1983
Operation and Maintenance, Defense Agencies	4,376	5,059	5,755
Claims, Defense	134	156	173
Court of Military Appeals	2	3	3
Total	4,512	5,218	5,931

Although small in comparision to the Service operation and maintenance accounts, Defense-wide activities encompass a wide range of programs that are of significant importance to the Defense effort. Three separate appropriations comprise Defense-wide activities. I plan to confine my discussion today to Operation and Maintenance, Defense Agencies and Claims, Defense.

We are requesting $172.5 million in fiscal year 1983 for Claims, Defense, an increase of $16.8 million over the fiscal year 1982 amount. It is important that this account be adequately funded to insure that unwarranted delays are not encountered in paying claims submitted by our military personnel, primarily for damage to household goods on permanent change-of-station moves and those submitted by our allies (primarily Germany) for maneuver damage cost which the U.S. is responsible for under Status of Forces Agreements.

The O&M, Defense Agencies appropriation includes a wide range of activities which support, either directly or indirectly, the operating and investment programs of the military departments. The fiscal year 1983 request of $5,755 million provides an increase of $696 million, of which about $289 million is for cost growth and $407 million is for real program growth. Price growth includes $140 million for the fiscal year 1982 pay supplemental which is financed in the fiscal year 1983 estimates. The $407 million represents real growth of about 8.0 percent. That amount includes $100 million for the new initiative for CINC readiness items. Exclusive of that item, the request would provide real growth of about 6.0 percent for all other programs.

To assist the Committee in its review of these diverse programs, I have grouped the various functions and organizations into five broad categories in Table 2.

TABLE 2.—OPERATION AND MAINTENANCE DEFENSE AGENCIES

Military people support	1,403	1,551	1,734
Dependent schools	465	482	538
American Forces Information Service	29	32	37
Uniformed Service University Health Sciences	22	25	28
CHAMPUS	852	965	1,080
Medical Information Systems	35	47	51
Tech support	1,413	1,546	1,834
Defense Mapping Agency	308	326	371
Defense Nuclear Agency	31	34	41
Intelligence and Communications	1,074	1,186	1,422
Logistics support: Defense Logistics Agency	1,215	1,296	1,389
Management and management support	328	375	435
Office, Secretary of Defense	82	96	107
Washington Headquarters Services	45	55	65
Defense Audit Service	17	19	23
Defense Contract Audit Agency	99	103	116
Office of Economic Adjustment	2	2	3
Defense Legal Services			2
Defense Investigative Service	68	84	98
Defense Audiovisual Agency	15	16	21
Organization, Joint Chiefs of Staff	17	291	363
Total	4,376	5,059	5,755

I would like to discuss each of these categories briefly:

Support to military people.—We are requesting an increase of $183 million in this category. Of that amount, $115 million is for CHAMPUS and $56 million is for dependents schools. These are programs of major importance to our military personnel. The fiscal year 1982 and fiscal year 1983 amounts include support for Section 6 schools in CONUS, which were transferred to Defense funding beginning in fiscal year 1982. Section 6 schools are schools operated on military installations. In prior years, these costs were reimbursed from the Department of Education. Beginning in fiscal year 1982, those costs are included in O&M, Defense Agencies. The fiscal year 1982 supplemental includes $11 million for Section 6 schools to augment the $75 currently appropriated. The $75 million is the same amount as spent in fiscal year 1981 and is inadequate to support operation of these schools in fiscal year 1982. Other programs included in this category are the American Forces Information Services, Uniformed Services University of the Health Sciences and the Tri-Service Medical Information System.

Technical support.—A number of technical functions and organizations are supported in O&M, Defense Agencies, including the Defense Mapping Agency, the Defense Nuclear Agency, the Defense Communications Agency and certain intelligence related activities. Classified details of the request can be provided to the committee separately. The fiscal year 1983 request includes an increase of $45 million for the Defense Mapping Agency to provide needed mapping support for major weapons systems, including the cruise missile. In addition, increases are included to support communications security and survivability initiatives.

Logistics support.—The major element of this category is the Defense Logistics Agency, which will be discussed separately by representatives of that organization.

Management and management support.—Included in this category are a number of activities which relate to management functions of DOD. Included are the costs of the Office of the Secretary of Defense and Washington Headquarters Services, which provides a broad range of administrative and financial services to a variety of organizations and activities, such as JCS, dependent schools, CHAMPUS and others. In addition to cost increases, the fiscal year 1983 request provides the resources necessary to provide annualized administrative support for various new programs supported, such as Section 6 schools, JCS exercise, etc. Increases for the Defense Audit Service and the Defense Contract Audit Agency are needed to insure that proper levels of audit coverage of Defense operations and investments is maintained. The fiscal year 1983 request includes an increase of $11 million for the Defense Investigative Service (DIS) to support additional personnel required to reduce the completion time on personnel background investigations. Additional personel and funding have been made available to DIS in fiscal year 1982 for this purpose. The fiscal year 1983 increase is required to finance the annualized cost of this important initiative to allow more effective utilization of the personnel on government and contractor rolls. The increase for the Defense Audiovisual Agency provides for normal cost increases and a change in funding procedures under which DAVA will finance, beginning in fiscal year 1983, the costs of various logistics and administrative support services currently provided on a nonreimbursable basis by the military departments.

Joint Chiefs of Staff.—Fiscal year 1982 and fical year 1983 estimates reflect the transfer of JCS exercises to this appropriation in fiscal year 1982 and the initiation of a $100 million CINC Readiness Fund in fiscal year 1983. Representatives of the OJCS will discuss these areas separately.

Mr. Chairman, that concludes my statement.

Senator **HUMPHREY**. General Drenz, you are Deputy Director of the Defense Logistics Agency?

STATEMENT OF BRIG. GEN. C. F. DRENZ, USA, DEPUTY DIRECTOR, DEFENSE LOGISTICS AGENCY (ACQUISITION MANAGEMENT), ACCOMPANIED BY WILLIAM J. CASSELL, COMPTROLLER

General **DRENZ**. Yes, Deputy Director of DLA for Acquisition Management. That is really the procurement side of the house, Mr. Chairman, contract administration and also procurement. I have a prepared statement that I can read or enter into the record, whichever you desire.

Senator **HUMPHREY**. Let us put it in the record. Do you want to summarize it or make any opening remarks?

General **DRENZ**. Only that the Defense Logistics Agency is a very diverse agency that supports the services. Our primary objective, of course, is to enhance and improve readiness of the military services and supplement this support so that they can accomplish their missions properly.

Senator **HUMPHREY**. Will you tell us about the consolidation of consumable items; how is that program going?

General **DRENZ**. Sir, at the present time the Services and DLA are accomplishing the preparatory action prescribed in the implementation plan for transfer of the 200,000 items.

The first increment of these items will be transferred from the services to DLA on the 1st of April, and the last increment will take place on the 1st of October this year.

The services have selected the items and are coding them for transfer at the present time. They are also initiating procurements to insure a full pipeline is available at the time of transfer and assembling the supply procurement technical data required by the Defense Logistics Agency to accept item management responsibility.

The Defense Logistics Agency is developing the system changes that are required for their portion of the evaluation mechanism and is initiating planning and organizational activities necessary to assume item management responsibility for the first increment that takes place on the 1st of April.

In general, the transfer is on schedule and is quite similar, in fact, to previous item management transfers to DLA. This, of course, is being assessed. It is rather unique and is getting intensive management from the DLA side of the house. We think it is coming along fine.

[The prepared statement of General Drenz follows:]

PREPARED STATEMENT OF BRIG. GEN. C. F. DRENZ, USA DEPUTY DIRECTOR, DEFENSE LOGISTICS AGENCY (ACQUISITION MANAGEMENT)

Mr. Chairman and Members: I appreciate the opportunity to appear before you and to present the Defense Logistics Agency's fiscal year 1983 resource requirements.

I would like to highlight for you the nature and scope of Agency operations and summarize the operation and maintenance funds needed to accomplish our various missions.

NATURE AND SCOPE OF OPERATIONS

The Defense Logistics Agency is an integral part of the DOD logistics system and a full partner in military force readiness. We support the U.S. military forces worldwide in three major areas—providing consumable items, administering contracts and managing surplus property reutilization and disposal. We also operate a number of Defense-wide logistics programs including:

The Federal Catalog System for identifying and providing descriptive and technical data on items or supply.

The Government-owned industrial plant equipment effort in which we maintain, store and promote the reuse of such equipment.

The Agency's responsibilities are widely diverse as is indicated by the following annual workloads:

Buying and supplying virtually all of the fuel, food, uniforms and medical supplies and about half the hardware items used by the Military Departments.

Filling over 30 million requisitions each year.

Receiving and shipping more than 19.3 million line items at our depots.

Administering 324 thousand contracts.

Managing reutilization and disposal of surplus property having an acquisition value of $4.9 billion.

DLA—A PARTNER IN READINESS

While DLA items are often not the most sophisticated or exotic they nevertheless are crucial to many of the major weapons systems operated by the Military Services. DLA's performance statistics are also impressive; our supply availability, for example, has consistently been above the DOD average while on-time performance by our depots is in the 97 to 98 percent range. During the first three quarters of fiscal year 1981, DLA's supply availability was 90.5 percent while the DOD total was 86.9 percent. We focus special management attention on weapons systems-related items through our Weapons System Support Program (WSSP). This program provides for stockage and priority allocation of resources to items identified by the Military Services as important to specified weapons system. There are currently over 250,000 different items identified to approximately 130 weapons systems in this support program. Examples of systems which DLA supports include the F-15, the F-14, TRIDENT, Black Hawk Helicopter, M-1 ABRAMS Tank and the FFG-7 (Fast Frigate). For the F-15 alone, we have identified over 47,000 items that we manage in support of that first line aircraft. Another example of the importance of DLA support to our major weapons systems—the allowance list of our aircraft carriers includes over 78,000 line items of consumable spare parts. DLA is responsible for 56,500 or over 72 percent of them. There are, as I previously indicated, a total of approximately 130 weapons systems in which DLA items are important contributors to military force readiness. We have a number of initiatives planned which will further enhance our effectiveness in this area. Major among these is the development and implementation of a Materiel Readiness Support (MARS) Model which will measure effectiveness, depth of readiness, and provide the capability to redirect resources to areas requiring improvement.

RESOURCE SUMMARY

DLA workloads over the last several years have been increasing at about five percent per year. At the same time our employment has declined from a high of nearly 61 thousand in fiscal year 1967 to a requested authorization of approximately 48,900 in fiscal year 1983. We have managed to accomplish our increasing workloads with fewer people because of the success of our aggressive productivity improvement program. This effort, which takes the form of increased automation, depot mechanization and organizational streamlining, has enabled us to continue to be responsive to the military departments despite the reduction in personnel levels.

FISCAL YEAR 1983 APPROPRIATION REQUEST

We are requesting $1,388.976 million in fiscal year 1983 for our operation and maintenance appropriation. Our fiscal year 1983 estimate assumes that our workload will continue to increase at the 5 percent rate. The increase in military force levels, activity and procurement programs will have an impact on our supply activities as well as our Contract Service Regions. Our workload will also increase because of the transfer to DLA of the management responsibility of some 200,000 consumable items. Our budget also assumes that we will be able to offset some of this workload increase with further increases in productivity of about 2 percent per year in both fiscal year 1982 and fiscal year 1983.

EMPLOYMENT

About 80 percent of O&M costs are for civilian salaries. We estimate that we will require about 48,900 personnel to accomplish our fiscal year 1983 workload, an increase of about 600 over the currently authorized levels. The majority of these personnel will be used in our 6 Supply Centers, 6 Depots and 9 Contract Administration Services Regions.

CONCLUSION

Mr. Chairman, this concludes my prepared statement. I will be pleased to respond to any questions you may have.

Senator **Humphrey**. General Penzler, may we have your statement, please? You can summarize it if you will.

STATEMENT OF BRIG. GEN. HARRY D. PENZLER, USA, DEPUTY DIRECTOR FOR OPERATIONS, STRATEGIC AND GENERAL OPERATIONS, ORGANIZATION OF THE JOINT CHIEFS OF STAFF

General **Penzler**. Our presence here today is primarily the result of the fiscal year 1982 DOD Appropriations Act which transferred air- and sea-lift funds for Joint Chiefs of Staff exercises from the Air Force and the Navy. With this transfer, the Joint Chiefs of Staff has the responsibility to manage the air- and sea-lift programs for joint exercises.

The JCS Exercise program had been essentially level from 1978 through 1980. The creation of the Rapid Deployment Joint Task Force in 1980 resulted in the need for additional airlift and sealift to support fiscal year 1981 exercise Bright Star and Accurate Test. We began managing the program last year, in November.

Immediately we were faced with the enhanced RDJTF Exercise Bright Star, which was funded at a level $29 million greater than was originally projected.

Currently we have absorbed about $20 million of that $29 million and in our midyear review in April we will further adjust the program to eliminate that deficit.

The fiscal year 1983 JCS Exercise program provides funding for minimum essential joint exercise requirements. Airlift flying hours for 1983 were reduced approximately $36 million to the fiscal year 1981 level; however, sealift was increased about $7 million. This sealift increase is the result of greater use of heavy forces in our exercises which should be moved by sea.

That concludes my opening remarks. I have a statement which I submitted which should be included in the record.

Senator HUMPHREY. Yes. Thank you.

[The prepared statement of General Penzler follows:]

PREPARED STATEMENT OF BRIG. GEN. HARRY D. PENZLER, DEPUTY DIRECTOR FOR OPERATIONS, STRATEGIC AND GENERAL OPERATIONS

Mr. Chairman and members of the subcommittee, the JCS Exercise program consists of JCS-directed and coordinated exercises which are either joint or combined. Joint exercises involve more than one Service and combined exercises are conducted with Allied forces. These exercises are sponsored by the JCS, the Services, defense agencies, or the unified (more than one Service) and specified (single Service) commands for the purpose of:

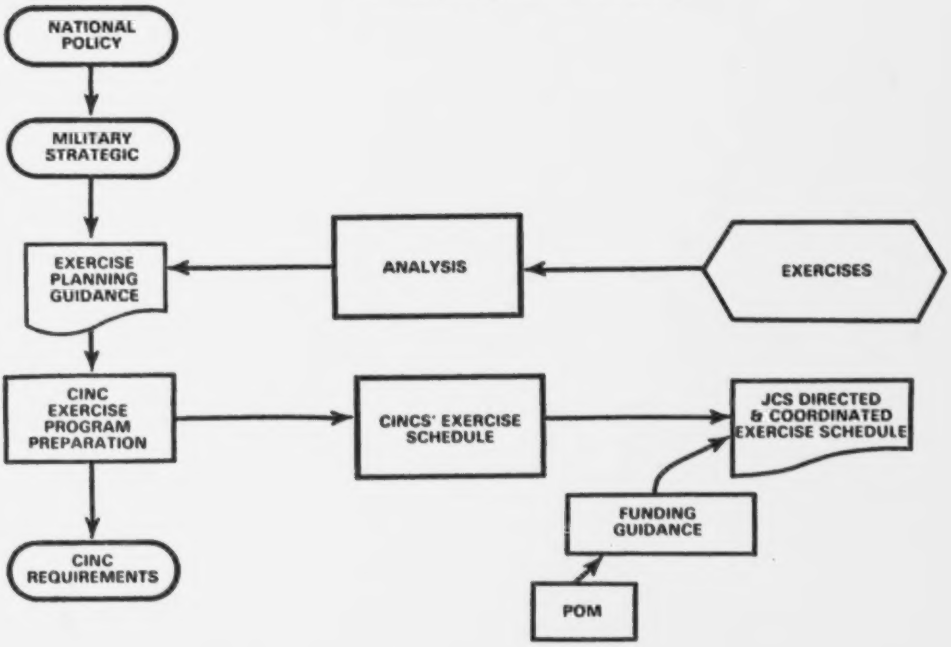
a. Supporting national policy and military strategy guidance.
b. Participating in mutual defense arrangements with allied nations.
c. Testing/evaluating operations or contingency plans.
d. Meeting unified and specified commands' joint readiness training objectives.

The JCS Exercise Program combines exercises from the various sponsors together under a single manager (JCS) to preclude redundancy in exercise objectives, avoid overcommitment of forces, and insure proper coordination and management.

The training that is accomplished through the JCS exercise program is an extension of Service provided unit and individual training and is essential to total force readiness. These exercises are used to practice joint tactics, techniques and procedures. Valuable experience is also gained in logistical and tactical force deployment and employment, including operations under unfamiliar environmental and geographic conditions. Joint exercises are designed to test operations plans, improve command, control and communications, inoperability with Allies, and meet joint readiness and training objectives. Combined exercises serve the purposes described above in addition to supporting defense arrangements with U.S. Allies.

JCS-directed exercises are specifically directed by the Joint Chief of Staff to meet specific objectives. JCS-coordinated exercises are other exercises the scheduling of which requires coordination between various commands and agencies by the Joint Chiefs of Staff.

THE JCS-DIRECTED AND JCS-COORDINATED EXERCISE SCHEDULE CYCLE



Attachment 1 depicts how the JCS-directed and JCS-coordinated exercise program is prepared. The Exercise Planning Guidance provides direction to the CINCs on the JCS Exercise Program. In preparing the Exercise Planning Guidance the OJCS considers the CINCs analysis of past major exercises and appropriate lessons learned. In addition, statements of national policy and military strategy which are considered relevant to the exercise program are reviewed in detail.

In the Exercise Planning Guidance the geographic and functional strategic specifically addressed in the Defense Guidance and similar documents provide the basic for the JCS Directed Exercise Program. In other words, this program is designed to support national policy and strategy by directing exercises in areas considered vital to U.S. interests.

With a JCS-directed exercise program defined by the Exercise Planning Guidance, each CINC prepares his exercise program by developing coordinated exercises for his area of responsibility. This program consists of those additional exercises which are necessary to meet the commands joint readiness and training objectives. The CINCs schedule is submitted to JCS where extensive coordination is conducted to integrate the CINCs input with Service support and required funding for air and sealift.

The overall JCS exercise programs from 1978 through 1980 were approved at a level which provided about 45,000 equivalent C-141 flying hours. For 1981, the approval level increase to 58,000 equivalent C-141 hours to support requirements resulting from the creation of the Rapid Deployment Joint Task Force. In 1982 the level rose to approximately 62,000 C-141 equivalent flying hours. The additional 4,000 hours of airlift capability provided for a Near Term Preposition Force (NTPF) exercise in the Pacific. In fiscal year 1983, airlift requirements have been reduced to the fiscal year 1981 level of 58,000 C-141 equivalent hour level by refining the program.

Since 1981 the CINCs have integrated or increased sealift into major exercises; examples include REFORGER (EUCOM), GALLANT EAGLE (REDCOM), TEAM SPIRIT (PACOM), and BRIGHT STAR (RDJTF). In fiscal year 1982, $16.4M was approved for sealift; 23.19M has been identified for fiscal year 1983 sealift requirements. Funds do not include Navy organic shipping.

The fiscal year 1982 Defense Appropriations Bill transferred airlift and sealift funding responsibility from the Air Force and Navy to JCS. The overall fiscal year 1983 JCS exercise program is shown in Attachment 2.

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FY 83 JCS EXERCISE PROGRAM

	TRANSPORTATION		SUPPORT			
COMMAND	AIRLIFT	SEALIFT	USAF	USA	USN	USMC
USEUCOM	70.329	6.300	6.694	28.200		
PACOM	42.076	6.800	3.201	7.200	1.5	5.231
USREDCOM	82.400	7.000	12.224	32.587		
LANTCOM	12.387	3.090	2.037	2.200	1.4	6.393
ADCOM	1.102		.304			
USSOUTHCOM	5.208		.409	.500		
SAC	.665		.742			
DNA	.416					
JCS/OTHER	6.165		3.184	6.208		
TOTAL	220.748	23.190	28.795	76.895	2.9	11.624

NOTES:
1. FIGURES FROM "JCS-DIRECTED AND JCS-COORDINATED EXERCISE SCHEDULES FY 1983-1987"
2. AIRLIFT FIGURES BASED ON ASIF RATE = $ 3806/C-141 HOUR
3. $ 220.748M AIRLIFT EQUATES TO A 58,000 HOUR PROGRAM

The programs for fiscal year 1983 airlift and sealift were prepared by Air Force and Navy and form the basis of the current program. These inputs were evaluated by OJCS and found adequate to support the current requirements for JCS exercises. Service support funds for the JCS exercises are provided by the individual Services. These support funds provide for JCS exercise costs other than airlift and sealift and include such items as POL, repair parts, ammunition and in-theatre logistical support. At Attachment 3 are the major exercises by CINC in the fiscal year 1983 program.

MAJOR EXERCISE SUMMARY

CINC	EXERCISE	AIRLIFT $M	SEALIFT $M	REMARKS
EUCOM	REFORGER/ CRESTED CAP	38.115	6.300	Deployment/employment exercises that moves CONUS forces to Europe.
	NATO/AMF Exercises ABLE ARCHER, COLD WINTER, QUANTUM JUMP, etc.	26.369		Exercises that provide the US participation in Allied Command Europe and NATO exercise program.
	FLINTLOCK	5.845		Series of exercises using dual-based and theater forces.
PACOM	TEAM SPIRIT	25.554	6.800	Exercise to reinforce Korea.
	OTHER EXERCISES	16.522		Other exercises support joint readiness or demonstrate support in such areas as Japan, Philippines, Thailand.
LANTCOM	SOLID SHIELD	8.500	3.090	Joint exercise to train staff and forces in emergency evacuation, sea control, air superiority, amphibious and air operations.
	OTHER EXERCISES	3.887		Other exercises support joint training objectives in LANTCOM area.
REDCOM	BRIGHT STAR	37.290	2.400	RDJTF SWA exercise to prepare for possible contingencies.
	GALLANT KNIGHT	9.737		A command post/field training exercise involving a RDJTF scenario.
	BRIM FROST	10.619	2.509	Air/ground field exercise in support of JTF, Alaska.
	GALLANT EAGLE	16.808	2.091	CONUS exercise to train ground/ air forces in a semi-desert environment.
	BORDER STAR	7.946		Train REDCOM/RDJTF forces in joint air defense operations.
ADCOM	AMALGAM SERIES	1.102		Strategic air defense systems readiness training exercises for NORAD.
SAC	GLOBAL SHIELD	.665		Readiness exercise to evaluate and train forces in conventional and nuclear procedures.
SOUTHCOM	KINDLE LIBERTY/ HALCON VISTA	5.208		Exercise defense of Panama Canal/ small Naval exercises with selected South American countries.
JCS	ELIGIBLE RECEIVER AND OTHER SMALL EXERCISES	6.581		No-notice deployment to Europe/ small exercises sponsored by DA and DNA.
TOTAL		220.748	23.190	

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Senator HUMPHREY. Do you have some kind of comparative figures, 1982 versus 1983 dollars, and so on?

General PENZLER. On airlift and sealift?

Senator HUMPHREY. Yes, however you have it broken down.

General PENZLER. As I mentioned, the difference was a reduction of about $36 million in airlift, plus $7 million in sealift.

In fiscal year 1982, airlift was at $256 million and in fiscal year 1983 it is $220.7 million.

Sealift in fiscal year 1982 was $16.4 million and in fiscal year 1983 it is $23.2 million.

Senator HUMPHREY. You are saying that the decline in airlift is attributable to, or was offset by, the increase in sealift; is that what you said earlier?

General PENZLER. There is some change in that regard. There are other changes associated with changing the program, modifying of exercises, changes in the flying-hour rate and those types of items.

Senator HUMPHREY. What I am trying to discern here—which is not easy from looking at these figures—is whether we are getting more JCS exercises or fewer in 1983? How would you characterize it?

General PENZLER. I would say overall we are getting a little less than we have in 1982. Basically, the difference between 1982 and 1983 is exercise Freedom Pennant, which exercises pre-positioned equipment in Australia. Those 4,000 hours of airlift are the primary difference in the airlift side.

On the sealift side there is increased use of sealift in similar-type exercises.

Senator HUMPHREY. Was there an increase in exercises in 1982 versus 1981?

General PENZLER. Freedom Pennant was the big change; other than that, it was pretty much level.

Senator HUMPHREY. The staff may have some questions to submit in writing. We will ask you to respond in 15 days.

Thank you very much for your testimony.

Senator Levin, the ranking member of the subcommittee.

Senator LEVIN. Good morning. If these have been answered, you can indicate that. I can check the record.

General Penzler, first of all, the cutback in the JCS exercise budget request for fiscal year 1983 is apparently $29 million below the 1982 level. I am wondering why we are cutting back in the JCS exercise program?

General PENZLER. There is one major change, exercise Freedom Pennant, approximately 4,000 hours, which will be reduced. That is an exercise to deploy personnel to pre-positioned equipment in Australia.

DECREASE IN FLYING HOURS

The other changes are primarily resulting from a decrease in the flying-hour rate and a modification of the program across the board.

Senator LEVIN. Why are you doing that?

General PENZLER. Pardon me.

Senator **Levin**. Why are we decreasing the flying-hour rate?

General **Penzler**. I am talking about the cost of flying hours.

Senator **Levin**. The rate?

General **Penzler**. Yes, sir; the cost itself is decreasing.

Senator **Levin**. Why is that?

Mr. **Dube**. Actually, it is more involved in the change of the military commands' billing method in terms of the mix of aircraft that is used. They have changed their billing methods which changed the distribution of recovery of cost by different aircraft types and the aircraft used in the exercies.

Senator **Levin**. Is the exercise itself going to be changed, or just the accounting method?

General **Penzler**. Both.

Senator **Levin**. Which exercise are we dropping, again?

General **Penzler**. Freedom Pennant will be reduced. It is a one-time exercise which was directed to move troops to pre-positioned equipment.

Senator **Levin**. You decided it was not necessary to repeat it.

General **Penzler**. It is not necessary to do that large an exercise every year. I anticipate we will return to a larger exercise in fiscal year 1984.

Senator **Levin**. There are no increases in these exercises in the individual services to make up for the reductions in the JCS exercise?

General **Penzler**. That is correct.

READINESS CONTINGENCY FUND

Senator **Levin**. I have some questions about the readiness contingency fund.

You have a $100 million contingency fund in there. I am wondering whether we can't do that through reprograming?

General **Penzler**. That is a program that the chairman discussed, I believe, last year. I did not realize we were going to talk about this subject this morning, so I have not talked to the current or new chairman, but I can give you my perspective.

Currently, the commanders-in-chief do not have readiness funds available to them that they can expend to take care of readiness items. What we are looking for is flexibility, quick reaction, with emphasis on low cost and quick payoff to improve readiness.

Senator **Levin**. Who is going to manage the fund?

General **Penzler**. It will be managed within my office.

Senator **Levin**. So you are going to be responsible?

General **Penzler**. I will assist the chairman in the management of the fund, yes, sir.

Senator **Levin**. Can you give us some specific examples that could not be reprogramed or could not be funded through reprograming?

General **Penzler**. Yes, sir; I have a couple in mind, but they are classified. I really would like to provide a classified paper on that, if I may.

Senator **Levin**. Those are readiness projects?

General **Penzler**. Yes, sir, currently ongoing.

Senator **Levin**. If you will provide that for the record in a classified form so that we can read that.

[The information follows:]

Senator Levin, current O&M reprograming procedures do give Service managers flexibility to reprogram funds within the rules agreed to by the Department of Defense and the congressional committees, and within the availability of O&M funds.

The O&M appropriations are annual accounts which finance a wide range of activities at bases which are geographically dispersed world wide. The responsibility for the day-to-day execution of these O&M programs is necessarily placed on the local field commander. He must operate and exercise the military forces under his command, feed and house his people, pay his utility bills and maintain other essential services. His mangement discretion is limited. Unforeseen readiness requirements which require reprograming would necessitate offsetting reductions to programs the field commander can control. These include the painting and repair of buildings, the furnishing of the barracks, and more importantly from a readiness standpoint the tempo of his operating activities. The level of these activities—flying, steaming and unit training—have a direct bearing on the combat readiness of our forces.

If the field commander cannot finance the unforeseen readiness requirement out of funds under his control, he can request additional funding from the next higher authority in the funding channel. This is generally the major command headquarters level. There the process must begin again. The requirement must be validated and the search for funds must be made. Again, because of the nature of the O&M programs, those programs which are most controllable tend to be the most readiness related. If the requirement cannot be met at this level it is referred to the next level, generally, the Military Department where the process begins again. If the solution cannot be found at that level and requires either formal reprograming under the rules or appropriation transfer under Section 733 of the Appropriation Act, the matter is referred to the Office of the Secretary of Defense and the Congress where the process begins again.

This is obviously a potentially disruptive and necessarily time consuming process. The Commander-in-Chief Readiness Fund is designed to allow the JCS to respond rapidly to unforeseen readiness requirements once they are identified and justified by the field commander.

Three specific examples have been provided to the Committee. Because of security classification, they are not provided there in the public record.

Senator **Levin**. This is the first time that this fund is being proposed, is it not?

General **Penzler**. It was discussed last year on the Hill, but this is the first time it has been included in the budget.

Senator **Levin**. I wonder if we can ask the Congressional Budget Office for their reaction to that. It might be useful. In terms of accountability it might be useful to have the CBO look at it.

Senator **Humphrey**. We will do that.

Senator **Levin**. With the transfer of the management of consumable items to the Defense Logistics Agency, apparently there are going to be some delivery delays that result and you have to balance that against the savings. Can you give us an estimate of the delivery delays that result because of the transfer of the management of consumables? The services still oppose this, I understand.

I guess this should be addressed to General Drenz: Could you estimate the delivery delays and estimate the savings and tell us why?

General **Drenz**. Are you referring to the delivery delays in issuing these items to the filed elements, or are you referring to delivery delays in transferring the items from the services to DLA?

Senator **Levin**. Delay in delivery of supplies to the customers.

General **Drenz**. At the present time I have no information regarding delivery delays in issuing those supplies to the customers.

Senator **Levin**. That would result from the proposed transfer?

General **Drenz**. That is correct.

Senator **Levin**. The services have not talked to you at all?

General **Drenz**. We are in the preparatory stages at the present time of implementing the plan to transfer these items. The first increment of these items will be transferred on the 1st of April. The last increment will be transferred on or about the 1st of October.

Under the concept of transfer, of course, these items are to be transferred with a full pipeline, so we don't envision any significant or major delays in issuing these items to the services. It should be about normal as was experienced when the items remained in the service.

Senator **Levin**. You haven't had any discussions with the services on the possible delays or any objections to this?

General **Drenz**. Let me verify this. We haven't any information of this nature that we are aware of this morning. We can provide for the record a verification of that.

[The information follows:]

There have been significant discussions. Some of the Military Departments are concerned over possible delays and are fearful that DLA will not be as responsive as their own systems. However, in view of DLA's excellent past record in supply availability and on-time fill I believe that our performance on the 200,000 items will be consistent with our record on the other items we manage.

General **Drenz**. As you are probably aware, there is a joint steering group and also a joint working group involved at a very high level that is overseeing the transfer of these items. All the participants in those groups are from various services and, of course, the Defense Logistics Agency.

Mr. **Dube**. Senator Levin, the concerns of the services were thoroughly expressed and evaluated in the Office of the Secretary of Defense where the decision was made to transfer the consumables. The services are concerned that the system will not be as responsive under DLA management as their own systems are.

The judgment is that we have a solid basis for being confident that the system will be equally responsive. That was the basis for the decision in order to achieve the savings.

Senator **Levin**. So you are saying now that the services are satisfied?

Mr. **Dube**. No. I am saying that the services are concerned; they continue to have that concern.

Senator **Levin**. Could we ask the services what their concerns are, for the record, so that we can find out what is going on, at least get that for the record, Mr. Chairman, relative to the transfer of the management of consumable items to the DLA?

Senator **Humphrey**. Yes, sir.

[The information requested was not received in time for printing.]

Senator **Humphrey**. Mr. Dube, I would like to ask you about the civilian pay raise. We have not seen a supplemental pay raise request yet for fiscal year 1982 from the administration.

The concern is that they may try to have the department just absorb some of the pay raises within appropriated funds. If this happens in the DOD, my fear is that it might be in the O. & M. account that you are going to have to come up with $100 million and that readiness will suffer. When can we expect that fiscal year 1982 supplemental pay raise?

Mr. DUBE. I can't tell you. We have not gotten any further information from OMB in terms of their exact plan for the timing of transmittal beyond the statement that it was expected in early spring, which begins Saturday. We have no further word on their precise plan.

Senator LEVIN. Where I come from and where the Chairman comes from, really, spring is in June, at least in the upper peninsula where I come from. I presume, though, that we will get that within a week or two?

Mr. DUBE. I am really not in a position to predict the timing of it because it relates to the OMB decisions with respect to the total Government-wide supplemental and the determination of what their requirements are and what their absorption capability is.

Senator LEVIN. For the record, can you try to give us a little more precise timetable on that?

Mr. DUBE. I will try to find out.

[The information follows:]

The Department of Defense has submitted the pay supplemental request to Office of Management and Budget (OMB). At this time, we do not know when the President will forward the request to Congress.

Senator LEVIN. Is it the plan of the administration to make the O. & M. account absorb any portion of the pay raise?

Mr. DUBE. We have no information to that effect. The fact that the amount was fully included in the 1982 estimates in the transmission of the 1983 budget indicates that that was not a decision at that time. We really don't expect that we will be asked to absorb any appreciable amounts.

Senator LEVIN. It still is not your expectation?

Mr. DUBE. It is not.

Senator LEVIN. As part of the efficiency campaign, the Secretary has claimed that consultant services and contract management studies have been reduced, saving $1.6 billion. Are you familiar with that figure?

Mr. DUBE. Yes, sir.

Senator LEVIN. Can you tell us what were the two figures that were there? What was substracted from what to give us the $1.6 billion, $3.9 to $2.3, or what was that?

Mr. DUBE. I don't have that here. I can try to provide that for the record.

Senator LEVIN. If you can provide that for the record.

If you also can give us a breakdown of those savings, identify for us where those savings were made, so that we can have some idea of how the $1.6 billion was arrived at, could you do that for the record, too?

Mr. DUBE. Yes; I will.

[The information follows:]

The estimated reduction of $1.6 billion from the efficiency savings which you have cited reflects the savings which are expected to accrue over the full range of the Five Year Defense Plan (FYDP) through fiscal year 1987. These cost areas are not distinctly identified programs in the structure of the FYDP. However, the reductions which were effected in the fiscal year 1982 estimates were reflected in the two Defense Department budget amendments for a total reduction of $210.6 million.

Since the Congress enacted the fiscal year 1982 appropriation, the estimates have been further reduced as a result of additional reviews, resulting in current estimated savings of $282.3 million for fiscal year 1982 under the Efficiencies and Economics Program. These additinal projected savings have been refined since the original press release. Consequently, the current estimates of the total savings in this cost area for the full FYDP span of years is $1.8 billion.

The total savings results from the annual increments of extending the savings from the fiscal year 1982 program into the subsequent years. However, it does not mean that the Department will show lesser estimates for any of those subsequent years but that the level of funding will be reduced from the amounts that would otherwise have been required.

Senator Levin. In light of the claims of savings in that area of consultant services, how do you explain the 19-percent growth or increase in contract studies and analyses in the OSD budget from 1981 to 1983? To aid you, I will give you the figures: from $13 million in 1981 to $24 million in 1983.

Mr. Dube. I don't have any details on those. I can provide those for the record.

Senator Levin. If you can provide that also for the record, it will be helpful.

[The information follows:]

Increase in the contract studies and analyses program in the Office of the Secretary of Defense from fiscal year 1981 to fiscal year 1983

Under Secretary of Defense for Research and Engineering:	*Thousands*
1981	$992
1982	1,732
1983	1,861
Total increase	869
Price inflation [1]	185
Program growth	684

[1] Price Inflation rates used were 8 percent from fiscal year 1981 to fiscal year 1982 and 6.1 percent from fiscal year 1982 to fiscal year 1983.

There has been a high priority placed on providing a capable and enduring command, control and communication system. The first order of business has been to do in-house studies to figure out the best way to accomplish that objective. Secondly, this administration has placed a high priority on strengthening the nation's industrial capability to mobilize and to perform efficiently in operation. In-house studies also have been required to support efforts toward that commitment. Thirdly, a series of management improvement efforts known as the Carlucci initiatives has been generated to improve the overall acquisition process. OUSDRE has been assigned the implementation task. O. & M. study funds are proposed to assist in discharging this duty.

Under Secretary of Defense for Policy:	*Thousands*
1981	$1,046
1982	1,627
1983	1,969
Total increase	923
Price inflation	183
Program growth	740

The Office of the Under Secretary of Defense for Policy required an increase of $581,000 from fiscal year 1981 to fiscal year 1982 and has requested an increase in program growth of $342,000 from fiscal year 1982 to fiscal year 1983. These increases are the result of work in the following areas:

Fiscal year 1981 to fiscal year 1982:	
1. Command, control and communications issues related to continuity of Government	$97,000
2. Soviet foreign policy activities (specific subject classified)	58,000
3. Intelligence system requirements evaluation and intelligence systems prioritization process assessment	233,000

4. Evaluation of crisis management organization in existence under 5 different levels of emergency mobilization, analysis of emergency authorities' operation, and an emergency management implementation approach 193,000

Fiscal year 1982 to fiscal year 1983:

1. Comprehensive review of the Law of the Sea Treaty and the U.S. position on navigation and overflight rights in contested areas 30,000
2. Computerized support to improve energy and strategic materials' modelling capabilities and the security assistance planning review cycle 50,000
3. Evaluation of mobilization and crisis management exercise performance, to assist in the development of exercise plans for testing and evaluation of industrial mobilization, and to support DOD requirements during the expansion of the DOD and interagency roles in emergency preparedness areas 262,000

The fiscal year 1981 to 1982 work represents new efforts in the areas specified. Policy had only recently been established and little O. & M. work was done prior to fiscal year 1981. The fiscal year 1982 to 1983 work specified represents new work rather than ongoing effort.

Director for net assessment:	*Thousands*
1981	$4,353
1982	7,697
1983	8,265
Total increase	3,912
Price inflation	818
Program growth	3,094

The increase from fiscal year 1982 is marginal but is related to the demand for studies of new and unique issues related to the defense expansion effort of the current administration. We continually find that specific research is needed on unique issues such as the relative size and burden of the Soviet and U.S. defense program. Improvement in methodology to evaluate forces in the strategic balance is also a large requirement. There is a growing demand for research focusing on understanding Soviet assessments and, therefore, deterrence. Finally, the budget is required to fund research that cuts across organizational lines in DOD or results from Presidential, Congressional or Cabinet questions and interests.

Assistant Secretary of Defense (Health Affairs):	*Thousands*
1981	$317
1982	373
1983	1,000
Total increase	683
Price inflation	48
Program growth	635

The increase of $683,000 in Contract Studies and Analyses from fiscal year 1981 to fiscal year 1983 is the result of a transfer of health affairs studies from the budget of another organization to the budget of the Office of the Secretary of Defense. In fiscal year 1981 and prior years, the OASD (Health Affairs) managed up to $2 million of funds for health and related studies which were budgeted for in the account of the Combined Health and Medical Program of the Uniformed Services (CHAMPUS). In their review of the fiscal year 1982 budget, the Congress decided that these studies were properly chargeable to the OSD account rather than the CHAMPUS account. The CHAMPUS account was then decreased by $2 million with $1 million transferred to the OSD budget for the health affairs studies. Thus, what appears to be an increase from fiscal year 1981 to fiscal year 1983 is, in fact, a significant net overall decrease in health affairs studies and analyses funding.

Assistant Secretary of Defense (Comptroller):	*Thousand*
1981	....
1982	....
1983	100
Total increase	100
Price inflation	....
Program growth	100

The Office of Special Projects is chartered to aid the ADS(C) in his determination of initiatives, generally with long term emphasis, to improve the functioning of his office. The accomplishment of that mission requires the use of outside contract studies and analysis. The $100,000 in the Contract Studies and Analysis line is for two items. The first item entails the assessment of the ability of key sectors of the industrial base to respond to Defense procurement needs. This effort is part of a larger OSD(C) plan to support the President's Cabinet Council on Economic Affairs project. The second item involves ASD(C) support of Deputy Secretary Carlucci's initiative No. 30 establishing the methods to assess the budgeting of resources-to-readiness. This item is part of a larger effort to bring networked business information management methods to OSD(C).

Assistant Secretary of Defense (Manpower, Reserve Affairs & Logistics):

Joint marketing research program (JMRP):	*Thousands*
1981	$2,167
1982	2,406
1983	3,500
Total increase	1,333
Price inflation	320
Program growth	1,013

This $3.5 million requested for the fiscal year 1983 program will provide funding for continuation of tracking studies and special market research studies aimed at evaluating military enlistment options, deriving effective recruiting strategies and improving the effectiveness of recruiting and advertising programs. Included is the initiation of substantial research to evaluate the effectiveness of different levels of Joint advertising. DOD currently decrements the total DOD advertising budget by about $34 for every $100 transferred to Joint Advertising. Research is required to verify the tradeoffs between joint and unilateral advertising at current levels of Joint Advertising and potential tradeoffs at higher levels.

Other manpower and logistics studies:	*Thousands*
1981	$3,193
1982	7,074
1983	8,210
Total increase	5,017
Price inflation	687
Program growth	4,330

The OASD (MRA&L) has been allocated $8.2 million to support O. & M. study requirements in the fiscal year 1983 President's Budget. This is an increase of 16 percent over that received in fiscal year 1982, and an increase of 97 percent when compared to fiscal year 1981. The reasons for the growth in the program over that appropriated in fiscal year 1981 are as follows:

The ASD (MRA&L) has broad responsibilities for providing all manpower and logistics support for the DOD. The resources expanded in these two areas account for approximately two-thirds of the total DOD budget. In order to most effectively manage these resources to meet these responsibilities, the MRA&L staff must have the capability to contract for studies and analyses to (1) generate and articulate data and concepts in support of policy development; (2) improve our ability to determine manpower and logistics support requirements; (3) improve our capacity to acquire, distribute, train, and utilize qualified personnel from all manpower sources; and (4) develop analytical tools and methodologies for determining the most cost effective mix of manpower and logistics support resources.

The fiscal year 1983 MRA&L O. & M. studies program is designed to identify and impact on policy needing review or improvement. The major issues of concern to the SecDef and MRA&L top management are determined as a byproduct of the 5-year program cycle and a review of ongoing personnel and logistics studies within DOD. These issues are critically reviewed to determine where new methodologies must be developed and data captured to improve the efficiency and effectiveness of the policymaking process while meeting the spirit and intent of executive and congressional concerns and guidance. These requiremetns are then prioritized against an evaluation of ongoing projects in order to establish a new program plan within likely funding levels. When the process is completed, a program will have been constituted to allow a maximum amount of impact on prospective policy.

During each of the last 4 fiscal years, the process has resulted in contract studies and analysis requirements of over $16 million being submitted by the functional staff for review and evaluation leading to a planned program. That amount is far above what the budget process will finally allocate to meet these requirements. Therefore, each year many projects go unfunded and must either wait for available funds or never be accomplished.

Fiscal year 1981 was an anomaly in that we suffered a severe reduction in our original President's Budget request of $6.8 million. In a fact-of-life evaluation of priorities it was determined to utilize study funding to offset POL price increases. The MRA&L appropriation for the studies program was finally set a $3.3 million. That amount was a 34-percent reduction from our fiscal year 1980 appropriation and a 52-percent reduction of the fiscal year 1981 original President's Budget. Due to the severity of that budget cut, important and critical study requirements could not be done and had to wait for fiscal year 1982 funding. The fiscal year 1982 appropriation has enabled us to get the studies program back on track and has allowed MRA&L to meet the majority of its critical requirements. The fiscal year 1983 program is an outgrowth of these requirements that must be continued from fiscal year 1982, and those new projects deemed necessary.

Veterans educational assistance program (VEAP):	*Thousands*
1981	$964
1982	
1983	
Total difference	−964
Price inflation	77
Program growth	−1,041

The VEAP program was a 1-year test program.

Sum total of above studies and analyses program amounts:	*Thousands*
1981	$13,032
1982	20,909
1983	24,905
Total increase	11,873
Price inflation	2,318
Program growth	9,555

Senator LEVIN. I will submit additional questions to you to be answered for the hearing record. If you will, please supply the answers for the record

[The questions, with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

JCS EXERCISES

Senator LEVIN. The fiscal year 1983 budget request for JCS exercises is $29 million below the fiscal year 1982 level. Among other specific joint exercises, Bright Star will apparently be smaller in fiscal year 1983 than in fiscal year 1982. Why are we cutting back on the JCS Exercise Programs in the fiscal year 1983 budget?

General PENZLER. The projected fiscal year 1983 JCS Exercise Program will cost approximately $29M less than the fiscal year 1982 Exercise Program but will provide an equivalent level of exercise activity. This is accomplished through the increased use of sealift in exercises such as Pacific Command's (PACOM) Team Spirit and Rapid Deployment Joint Task Force (RDJTF) exercises. The use of sealift allows the deployment of greater amounts of unit equipment to support these exercises and more than offsets the planned reduction of 4,360 C-141 equivalent flying hours (approx. $16.6M) in fiscal year 1983. Another reason that the cost of the fiscal year 1983 Exercise Program is less than the fiscal year 1982 program involves an adjustment to the Airlift Services Industrial Fund (ASIF) flying hour rate. The costs associated with the C-141 and C-5 have been reduced while the rate for the C-130 was increased. This action was taken to more accurately reflect the cost of the capability of the respective aircraft. The overall effect was a decrease in the projected cost for airlift in the JCS Exercise Program for fiscal year 1983.

Senator LEVIN. What JCS Exercises that are being done in fiscal year 1982 will be reduced or eliminated in fiscal year 1983?

General PENZLER. The only fiscal year 1982 exercises that are not programmed to take place in fiscal year 1983 are those exercises on a two year cycle. Both Atlantic Command and Readiness Command have exercises in this category. Within USREDCOM's program, fiscal year 1982 exercises Bold Eagle and Brave Shield are replaced by exercises Brim Frost and Border Star in fiscal year 1983. Within LANTCOM's program fiscal year 1982 exercises Northern Wedding and Ocean Venture are replaced by Solid Shield, Locked Gate, Ocean Safari, and Universal Trek in fiscal year 1983.

Senator **Levin**. Are reductions in JCS Exercises being made up by increases in exercises in the individual Services?

General **Penzler**. There is no reduction in the overall activity level within the JCS Exercise Program for fiscal year 1983 after consideration of price adjustments and the increased use of sealift. The real increase in sealift of approximately 35 percent ($5.79M greater than the fiscal year 1982 program of $16.4M) will offset the reduction in airlift of approximately 7 percent (4360 C–141 equivalent hours, $16.6M less than the fiscal year 1982 program).

COMMANDER IN CHIEF READINESS FUND

Senator **Levin**. The fiscal year 1983 budget includes a new $100 million contingency fund for high-priority readiness initiatives recommended by the field commanders. How will this fund be managed?

General **Penzler**. The fund will be internally managed within the Organization of the Joint Chiefs of Staff for the Chairman. The purpose of the fund is to provide the CINC's with a source of immediately available funds to satisfy required initiatives and improve near-term readiness. At the beginning of the fiscal year each CINC will be provided a portion of the fund for his use for timely initiatives or readiness items which fall within the guidelines established by the Chairman. The amount allocated to each CINC will be determined considering the size of the CINC's force, area of responsibility, changes in national policy and strategy, and other current requirements. The residual portion of the fund will be held in reserve by the Chairman to satisfy real-time requests from the CINC's throughout the budget year. This form of fund management will provide the CINC with funds that he can use to correct immediately his readiness shortfalls. Using the CINC's Readiness Fund and the method of management described above, a readiness shortfall can be funded in a matter of days where the current system of reprogramming normally requires months.

FUND EXPENDITURES

Senator **Levin**. Who will decide what projects are funded out of this account? What criteria will be used to determine what projects will be funded?

General **Penzler**. The Chairman, Joint Chiefs of Staff will approve all categories of expenditures from this account. The criteria or guidelines for fund expenditures are as follows:

The primary purpose of the fund is to provide commanders of unified and specified commands with a fast reaction capability to meet unplanned requirements with an emphasis on low cost, fast payoff projects for: The improvement of their readiness; the improvement of their warfighting efficiency; and meeting urgent short-term, unprogrammed, unbudgeted operating requirements.

Categories of Authorized Expenditures: Resources consumed in use; assemblies, spares, and repair parts; petroleum, oil, and lubricants; repair and maintenance of real property not to exceed $100 thousand per project; cost of maintenance, repair, overhaul or rework of investment items; services received; rentals and leases (nonrecurring and with a duration of one year or less); and procurement items that are not major end items and do not exeed congressional authorization.

Unauthorized expenditures: Requirements that do not have a direct impact on readiness; acquisition of major systems or end items; requirements which are the normal responsibility of non-DOD agencies; purchases of the same equipment or service for more than one budget year on a continuing basis; projects which have been specifically disapproved previously by OSD, OMB, or Congress; salaries and expenses of Government employees, except TDY expenses of projects funded by this account; logistic support for prior year procurements; and augmentation of a programmed or budgeted JCS exercise.

Senator **Levin**. Why was this new fund included in the fiscal year 1983 budget? Did field commanders specifically request this new fund be set up?

General **Penzler**. The commanders of unified and specified commands are responsible for the deployment and employment of US military forces from assigned Services. However, commanders of the unified and specified commands have no funds available to correct readiness deficiencies or carry out initiatives. All funding is through his component Services (Army, Navy, Air Force, Marine Corps). Therefore, he must make his request, through the component Services, to the appropriate Military Department in Washington. If the Service chooses to fund the initiatives, they must reprioritize their Service program, eliminate or decrease funding from approved programs and, in some cases, request congressional approval. When the Services support the initiatives of commanders of a unified or specified command, there is a considerable time lapse, normally 6 months. This delay results from the time required to evaluate the request, reprioritization, reprogramming, congressional approval, and subsequent funding. In view of the above, the Defense Resources Board approved $100 million per year, starting in fiscal year 1983, for the CINC's Readiness Fund. The Chairman, Joint Chiefs of Staff and the commanders of the unified and specified commands fully support this program. Both feel it is critical to near-term readiness within the unified and specified commands to have some funding authority immediately available to the CINC's.

PROJECTS FUNDED

Senator **Levin**. What types of projects will be funded out of this account?

General **Penzler**. Projects financed by this fund will be focused on improving the commands readiness, warfighting efficiency, and meeting unprogrammed requirements. For example, in the timeframe October/December 1981, "Exercise Bright Star" deployed the Conus-based forces under the command of the Commander, Rapid Deployment Joint Task Force (RDJTF) to Egypt, Sudan, Somalia, and Oman. The next programmed exercise of the RDJTF to Southwest Asia is scheduled for [deleted]. Subsequent to the exercise (Bright Star 1981), comments from host nation officials, the U.S. political and diplomatic community, and senior military commanders, indicated that an exercise in this vital area of the world every two years is insufficient. The CINCs Readiness Fund could be used to fund all or a portion of an exercise of this type to Southwest Asia in [deleted]. To fund this unprogrammed exercise in the required timeframe will require other JCS exercises to be cancelled and/or modified.

Another example would be the improvement of security at our overseas nuclear weapon storage sites. Terrorist activity has increased around the world and especially in Europe. This activity is highlighted by the recent killing of a U.S. officer in France and the kidnapping of General J. L. Dozier in Italy. In his subsequent debrief, B. G. Dozier cited examples of increased terrorist interest in nuclear weapons and storage sites. Numerous precautionary measures have been taken to improve security, and the Long-Range Security Program (LRSP) will alleviate many physical security shortfalls; however, little has been done to enhance the quality of life experienced by U.S. personnel protecting our nuclear weapons overseas. The majority of nuclear weapons storage sites were built to NATO criteria in the late 1950's and early 1960's. Quality of life is a U.S. responsibility for our security/custody forces. U.S. personnel are currently living in buildings which are antiquated, feeding facilities are being operated with worn equipment, recreational activities/facilities are generally non-existent (except by self-help initiatives), furnishings are austere, and other basic necessities normally available in the United States, are not available at a majority of the overseas sites. There is unanimous agreement in the nuclear weapon community that "quality of life" improvements are essential to the continued security of U.S. nuclear weapons overseas. U.S. Commander in Chief, Europe has provided a listing of items considered necessary to improve the quality of life of U.S. security/custodial forces in Europe. These items fall into four major categories: recreation equipment/facilities; room and dining hall furnishings; food preparation equipment; and electronic equipment. There are approximately [deleted] isolated overseas nuclear weapon storage facilities. The U.S. Commander in Chief, Europe's one time request for funds to enhance quality of life will provide a visual indication to security/custodial forces that they are indeed essential to the continued security of our nuclear weapons and will provide a more alert and mentally motivated guard force. The CINC Readiness Fund could be used immediately to fund the U.S. CINCEUR requested quality of life improvements with the exception of major military construction. Current procedures require the CINC's to request funds from OSD or the Services, which results in extensive delays in satisfying these important requirements.

The U.S. Army, Europe would [deleted] if contaminated with chemical agents. There is limited decontamination capability in U.S. units. Army decontamination units can be made more effective and efficient if they could connect U.S. chemical decontamination equipment to German fire hydrants as a source of water. It was found that a commercial fire hydrant adapter is available on the open market. An expenditure from the CINC's Readiness Fund would enhance the U.S. decontamination units capability to conduct chemical/nuclear decontamination immediately.

DEFENSE LOGISTICS AGENCY

Senator **Levin**. General Drenz, please give the subcommittee an update on the plan to transfer management of the 200,000 consumable items from the individual

Service's supply system to the Defense Logistics Agency. What types of items will actually be transferred? How will this transfer save money? How much money will it save?

General **Drenz**. The transfer is on schedule and the first increment of items was absorbed into the DLA system on April 1, 1982. The types of items to be transferred are such things as pipe, tubing, hose and fittings; electrical and electronic equipment components; fire control equipment; and maintenance and repair items. Money will be saved by reducing the number of people involved in the management of the items. DLA received an increase of 403 civilian end strength authorizations to handle the work; the services were reduced 906 slots for a net recurring savings of 503 civilian spaces. The Department will save $15 million annually as a result of this transfer. The adjustments were based on Defense Audit Service (DAS) findings.

Senator **Levin**. General Drenz, originally the proposal for consumable item transfer to DLA encompassed 1.3 million consumable items currently managed by the Services. How do the 200,000 items selected for transfer to DLA compare to the 1.3 million items originally considered for transfer to DLA? How do the 200,000 consumable items now being transferred compare to the items DLA is currently managing?

General **Drenz**. OSD guidance was that the items being transferred were to be truly representative of the items managed by the Services. They were selected—50/50—from the Commodity Integrated Materiel Management supply classes and the Weapons Integrated Materiel Manager classes. The items are also of a varying degree of management intensity including active, inactive and problem items. The Services selected the classes to be transferred. The items transferred are similar to those DLA previously managed in that they are consumables. Including are pipe, tubing, hose and fittings; hardware and abrasives; and some weapons systems-type items which are similar to those we currently manage. I should note that some of the items being transferred do have longer lead times than is usual for DLA but, by and large, consumables are consumables.

Senator **Levin**. General Drenz, as you know, the military services continue to express concern over the above proposed transfer. The Services apparently feel that transfer will result in delivery delays of supplies to customers and decreased force readiness. In your opinion, will DLA be able to provide the Services with a level of supply support for the items that are being transferred for management to DLA that is comparable to the level of support before the items were transferred? Is force readiness going to suffer through delivery delays because of this transfer?

General **Drenz**. DLA will be able to provide improved support to the Services on those items. Our performance statistics, when compared with those of the Services, are impressive. For example, our supply availability for fiscal year 1981 was 90.6 percent while the DOD average was 88.8 percent; our inventory control point on-time processing was 85.9 percent which was well above the DOD average of 84.2 percent while on-time processing at our depots was 93.7 percent as compared with the DOD average of 91.7 percent. I believe that these statistics lend credence to our position that the transfer will, in fact, enhance force readiness.

Senator **Levin**. When can we expect to receive a supplemental request for the fiscal year 1982 civilian pay raise?

Is the Administration planning to make the O&M accounts absorb any portion of this pay raise within existing funds in fiscal year 1982?

Mr. **Dube**. The fiscal year 1982 civilian pay supplemental has been submitted to OMB. We do not expect to absorb any portion of the pay raise in fiscal year 1982.

Senator **Levin**. Mr. Dube, as part of the Department of Defense's efficiency campaign, Secretary Weinberger has claimed that "consultant services and contract management studies have been drastically reduced, saving $1.6 billion." The same press release from DOD also said "This area will continue to receive close scrutiny to avoid unnecessary expenditures."

In light of this effort to control consultant costs, how do you explan the 91-percent growth in Contract Studies and Analyses in the OSD Budget from fiscal year 1981 to fiscal year 1983, which went from $13 million in 1981 to $24.9 million in 1983?

Is OSD exempt from the scrutiny being provided to consultant studies in the rest of Department of Defense?

Mr. **Dube**. OSD is not exempt from scrutiny in the consultant studies area. The request for consultant studies in both fiscal year 1982 and fiscal year 1983 initially exceeded the amounts finally submitted in the President's Budget.

TRANSFER OF CONSUMABLE ITEMS

Senator **Levin**. Mr. Dube, summarize by Service the specific items by category which make up the 200,000 consumable items to be transferred from the Services supply systems to Defense Logistics Agency.

Answer. At this point in time we can provide the number of items nominated for transfer by the Services as follows:

Army	35,911
Navy	72,531
Air Force	95,827
Marine Corps	2,716
Total	206,985

The Services were given the authority to select the items to be transferred. We do not have information as to the categories of items to be transferred.

Senator **Levin**. Indicate the civilian personnel savings by Service and the corresponding increases in DLA personnel included in the fiscal year 1982 and/or fiscal year 1983 budgets related to the transfer of consumable items.

Answer. The savings as a result of the transfer of 200,000 consumable items have been included in the fiscal year 1983 budget. The savings by the Services are 906 personnel and $24.9 million. The increase to DLA is 403 personnel and $9.9 million for a net savings to the DOD of 503 personnel and $15 million. The breakdown by Service and DLA is as follows.

Component	Personnel	In millions of dollars
Army	−408	−$12.3
Navy	−122	−3.6
Air Force	−367	−8.8
Marine Corps	−9	−0.2
DLA	+403	+9.9
Net	−503	−15.0

CIVILIAN SAVINGS

Senator **Levin**. For each Service indicate the command or installation where the civilian savings were made.

Answer. The civilian savings identified in the fiscal year 1983 budget submission were made on a Service basis only. The allocation of personnel adjustments to specific commands or installations is a Service prerogative that will be accomplished by them in conjunction with any other on-going workload adjustments. We do not know at this time what the civilian savings will be at the individual command or installation level.

Senator **Levin**. Were these savings made by attrition or did government employees lose jobs as a result of this transfer?

Answer. The impact of these personnel savings has not yet taken place because the item transfer will not begin until April 1, 1982. We believe that where personnel reductions are necessary, they can readily be handled by attrition. In the event that attrition cannot accommodate the personnel impact, personnel will be offered a position with the Defense Logistics Agency.

Senator **Levin**. Indicate by Service and by command or installation the civilian personnel savings that would be achieved if the remaining 1.1 million consumable items were transferred to DLA.

Answer. That information is not available. Based on our projection, we believe that, on a DoD wide basis, the transfer of the remaining 1.1 million items could produce savings of 2,900 personnel and $70 million. These savings have not been broken down on a Service or installation basis, but of course would be at a future point in time if additional items were transferred.

Senator **Levin**. What would be the increase in DLA civilians required to manage the increased workload?

Answer. That information is not available for the same reasons stated in the answer to the previous question.

Senator LEVIN. Mr. Dube, are further civilian reductions planned for fiscal year 1984 as a result of transferring more consumable items to DLA control. If so, indicate anticipated savings by Service.

Answer. No. No decision will be made to transfer additional items until the evaluation of the first increment has been completed.

Senator LEVIN. Mr. Dube when will the decision be made on whether or not to transfer more consumable to DLA beyond the planned 200,000 items scheduled for transfer in fiscal year 1982?

Answer. The implementation plan for the initial transfer of consumable items calls for a comprehensive evaluation of its results. No fixed completion date has been established. The plan provides the flexibility to continue the evaluation until sufficient data are available. No additional item transfers will be considered until the results of this evaluation are determined.

Senator LEVIN. Mr. Dube, would you insert in the record a rationale for this proposed transfer of consumable item management to the Defense Logistics Agency?

Answer. Attached as an insert for the record is the statement of Dr. Richard D. Webster, Deputy Assistant Secretary of Defense for Logistics and Materiel Management on the transfer of consumable item management. This statement, provided to the Subcommittee on Readiness of the House Committee on Armed Services, contains a comprehensive rationale for the transfer.

PREPARED STATEMENT BY DR. RICHARD D. WEBSTER, DEPUTY ASSISTANT SECRETARY OF DEFENSE (LOGISTICS AND MATERIEL MANAGEMENT)

Mr. Chairman, Members of the Subcommittee: I am Richard D. Webster, Deputy Assistant Secretary of Defense for Logistics and Materiel Management. I am pleased to appear before your subcommittee today to testify on the decision to transfer the management responsibility for 200,000 consumable items from the Military Services to the Defense Logistics Agency (DLA). My purpose is to provide you with some of the background and rationale which we considered in developing and evaluating the proposal. Following my testimony, Brigadier General M. A. Johnson, USMC, Chairman of the Joint Implementation Group (JIG) for the Realignment of Item Management Assignments, will brief the subcommittee on the plan to accomplish the transfer and will provide the current status of our efforts.

The Department of Defense (DOD) uses over 3.4 million different consumable items, ranging from uniforms and tires to complex and classified components of weapon systems. DLA presently manages 2 million of these consumable items, while the Services manage the remaining 1.4 million. DLA has the management responsibility for commodity oriented Federal Supply Classes (FSCs), which include common items used by more than Service and peculiar items such as selected components of first-line weapon systems. The Services currently have the management responsibility for consumable items which fall into one of the following three categories:

Items which are repaired, manufactured, or reclaimed by the Services;

Items which require special management because of security requirements or design instability; or

Items in weapons oriented classes not assigned to DLA and some weapon system related items in commodity oriented classes which are assigned to DLA.

In accordance with the mandate of President Reagan and Secretary of Defense Weinberger to achieve economies and efficiencies in operations, while maintaining or improving military readiness, a previous OSD proposal to transfer 1.4 million consumable items to DLA for management has been re-introduced. The proposal identifies the following benefits:

The transfer would improve military readiness by increasing the effectiveness of the DOD supply system as measured by the following three supply performance indicators: supply availability rate, Inventory Control Point (ICP) processing time, and the total pipeline on-time shipment rate.

The supply availability rate is the percentage of customer orders filled from stock during initial processing. DLA's supply availability rate during the period from 1978 to 1981 has exceeded the Services' rate by a range of 4 to 15 percentage points. We believe that DLA will be able to improve the rate significantly for the items to be transferred. In the Defense Audit Service (DAS) review of the proposal, the auditors indicated that the supply availability rate is the most significant measure of supply support. They concluded that based on past performance DLA could achieve a higher rate than the Services for these items.

The ICP processing time measures the percentage of customer orders that are processed by the ICP within established DOD time standards. During the 1978-1981 timeframe, the DLA rate exceeded the Services' rate by a range of 3 to 11 percentage points.

The total pipeline on-time shipment rate is based on the time elapsed between the submission of a requisition and the receipt of the materiel. It is expressed as the percentage of shipments received by the customer within DOD time standards. DLA's on-time rate to overseas customers, which is critical from a readiness standpoint, exceeded the Services' rate by 9 to 37 percentage points during the 1978-1981 timeframe. The DAS auditors cited DLA's performance for overseas shipments and stated that by applying DLA's response times to the transferred items, reductions in pipeline inventory costs may be possible for some overseas customers.

The transfer would substantially reduce operating costs. The economic analysis for the proposal concluded that the transfer of all Service-managed consumables to DLA management would reduce personnel requirements by 4000 spaces and save $100 million annually in operating costs. The savings were based on the difference in personnel resources required by the Services of DLA to manage the items proposed for transfer. The economic analysis also considered the nonrecurring costs to transfer all Service-managed consumables to DLA and concluded that a breakeven point would be reached in slightly less than three years.

The transfer would reduce the present competition among the Services and DLA for the available industrial base and would provide a single DOD interface with industry.

The transfer would lower procurement costs by increasing the amount of price competition acheived on our consumable item procurements. In fiscal year 1979, the Services awarded only 25 percent of their procurement dollars competitively, compared with 68 percent by DLA. During the same period the Services made $3.3 billion of purchases for the items proposed for transfer. Substantial savings in procurement dollars are possible by applying the higher DLA competitive procurement rate to these items. We estimate that for each 1 percent improvement that DLA achieves in the rate, an annual savings of approximately $12.7 million will be obtained.

The Surveys and Investigations (S&I) Staff Report to the House Appropriations Committee, entitled "Procurement Practices of the Department of Defense," September 1981, contained a detailed discussion of the consumable item transfer. The S&I report indicated that the transfer will result in more efficient, streamlined, and economical procurement practices as well as substantial annual savings. They stated that the savings from improving the competitive procurement rate can realistically increase the proposal's total savings to approximately $200-300 million per year. The S&I staff reviewed that Service positions on the proposed transfer and stated that "The services' arguments against the proposal are parochial, and at times even emotional." They also stated that "The services can interminably rebut, or disagree with any economic analysis performed by any organization regardless of qualifications. It is virtually impossible to perform the finite analysis the services will continue to insist on." In conclusion, the S&I staff stated that ". . . the proposed realignment of management for all consumable items should be directed for implementation without further study or delay.

In their responses to the proposal, the Services and the Joint Chiefs of Staff (JCS) expressed concern with the following three issues:

The impact of the transfer on military readiness;

The complexity of the items to be transferred; and

The savings to be achieved by the transfer.

I would like to address each of these areas.

With regard to readiness, we believe the transfer will actually improve supply support to the Services. As I mentioned earlier, DLA's supply performance during the 1978-81 timeframe consistently exceeded that of the Services. Actually, the higher level of DLA supply performance extends over the past ten years as well as the period of the Viet Nam conflict. During this difficult period of wartime support, DLA achieved the highest supply performance of all Components. In recognition of DLA's high level of performance, the Services asked DLA to manage on an intensive basis weapon system items affecting 128 major weapon systems. DLA accomplishes this special management through their Weapon System Support Program. Within this program, DLA is managing 44,400 Army nominated items affecting 29 weapon systems such as the Hawk Missile, the M198 Howitzer, and the M60 Tank. DLA is also managing 138,000 Navy nominated items affecting 31 weapon systems including the Polaris Missile, the Trident submarine, and the F-14 Aircraft. In addition, DLA is managing 122,400 Air Force nominated items affecting 49 weapon systems including the F-15 and F-16 aircraft, the Galaxy C-5, and the Minuteman and Titan Missile Systems. For the Marine Corps, DLA is managing 6,500 nominated items affecting 19 weapon systems such as the LVT-7 Landing Vehicle and the M110Al Self-

Propelled Howitzer. DLA's supply performance on these items in the Weapon Systems Support Program has been outstanding as evidenced by an in-the-bin availability rate which averaged 93 percent during the 1979–81 timeframe. As a final point, I would like to note that the S&I report reviewed the Service position on readiness and concluded that "the potential for savings and the possibilities for improved readiness are quite evident . . ."

As to the complexity of the items to be transferred, the Services contended their items were beyond the capability of DLA to manage. The DAS reviewed this contention and concluded that few of the Services' consumable items were more difficult to manage than DLA's current items, and almost none were beyond the capability of DLA to manage using in-place systems and procedures. They also stated that the complex nature of an item is not synonymous with the complexity of item management. The S&I report addressed this area and supported the DAS findings, based on their own observations at the operational level.

In addressing item complexity, the Services also indicated they should retain consumable item management responsibility in order to permit the integration of program management, engineering, and technical support with item management in a single command. However, the DAS found that the Service item managers were not dependent on collocated technical personnel for day-to-day management. Furthermore, the DAS pointed out that collocation of program management, engineering and technicl personnel does not exist for the weapon system items that DLA already manages. Despite this separation of management responsibilities, the auditors could find no substantiated criticism of DLA's performance in managing these items.

Finally, in their responses to the proposal, the Services and JCS contended that the projected savings were overstated. They provided new cost data which indicated that there was no savings. The DAS auditors reviewed the cost data provided by the Services as well as new cost data developed for DLA. DAS concluded that substantial annual savings in the range of $63–84 million were possible; however, the auditors acknowledged that their estimate was an understatement because it did not include a quantification of savings in overhead and support functions affected by the item transfer. Subsequently, an economic analysis was prepared by the Defense Logistics Analysis Office using the DAS resource estimates, supplemented to include the overhead and support functions. This analysis concluded that the transfer of all consumables to DLA would result in a net reduction of 4,028 spaces and an annual recurring savings of 92.6 million in 1978 dollars and 110.9 million in 1981 dollars. In subsequent papers addressing the proposal, we have used a net reduction of 4,000 spaces and $100 million per year in order to portray conservatively the estimated savings.

We have carefully considered the Service positions on the proposal. We believe firmly that the transfer of consumable item management responsibility to DLA will maintain or improve military readiness while simultaneously achieving significant efficiencies and economies. However, in recognition of the Service positions, Deputy Secretary of Defense Carlucci decided to exclude from the transfer six categories of items recommended by the Services for continued Service management. The categories excluded from the transfer include classified items, Service manufactured items, nuclear propulsion items, items controlled by the Defense Nuclear Agency and the National Security Agency, items which are highly susceptible to design change (called design unstable), and items which are normally repaired at the field or base level. We estimate the exclusion of these items will reduce the number of Service-managed consumables eligible for transfer from 1.4 million to approximately 1.2 million items. In addition, Dr. Korb, the Assistant Secretary of Defense for Manpower, reserve Affairs and Logistics has been authorized by Deputy Secretary Carlucci to make additional exceptions when continued Service management would best serve National Defense interests.

In his decision memorandum of July 7, 1981, Deputy Secretary Carlucci directed the initial transfer of 200,000 items of the 1.2 million items available for transfer. He indicated that following this transfer, we would evaluate DLA performance and determine whether additional items should be transferred to DLA. A copy of his decision memorandum was provided to Chairman Price on July 13. The annual savings to be achieved by this smaller transfer is estimated to be approximately $15 million.

The Deputy Secretary also established a Steering Committee chaired by Dr. Korb to oversee the item transfer. In addition, a Joint Implementation Group chaired by BG Johnson and consisting of Service, DLA, and JCS representatives was established to develop a plan to implement the decision. A detailed implementation plan was developed by the joint group and approved by Dr. Korb on October 9. This plan contains a separate section specifically designed to measure the effects of the item transfer on materiel readiness. The implementation plan includes 25 jointly agreed upon performance measures which will be utilized to compare actual DLA performance on the transferred items against past Service performance of the same items. We believe this joint evaluation effort will provide an objective means to assess thoroughly the impact of the transfer on readiness and to evaluate the capability of DLA to effectively manage the items. A decision on further transfers will be based on this evaluation.

In summary, we have modified our initial proposal to transfer all consumable items to DLA by excluding six categories of items recommended by the services. We have also provided a means whereby additional exceptions can be made when continued Service management would best serve National Defense interests. We have reduced the scope of the initial transfer from 1.4 million items to 200,000 items. We have provided for a joint objective evaluation of the readiness impacts of the transfer. We believe this is a sound and prudent approach and is in accordance with the mandate of President Reagan and Secretary Weinberger to achieve economies and efficiencies in operations while maintaining or improving military readiness.

Mr. Chairman, during the course of my statement I have referred to the Surveys and Investigations Staff Report to the HAC, entitled "Procurement Practices of the Department of Defense." This report contains a separate section on the transfer of consumables and strongly supports our position that the transfer will achieve significant savings while maintaining or improving readiness. The report also concludes that the total proposal should be implemented without further study or delay. Since the report is too lengthy for me to read aloud, I have attached to my statement those pages of the report which address the transfer.

Mr. Chairman, that completes my formal statement.

A REPORT TO THE COMMITTEE ON APPROPRIATIONS, U.S. HOUSE OF REPRESENTATIVES ON THE PROCUREMENT PRACTICES OF THE DEPARTMENT OF DEFENSE—VOLUME III

VII. DOD SHOULD DIRECT THE SERVICES TO TRANSFER MANAGEMENT OF CONSUMABLES TO THE DEFENSE LOGISTICS AGENCY

A. INTRODUCTION

Each of the services and the Defense Logistics Agency (DLA) operate separate facilities required to receive, store, and issue the material for which it has wholesale management responsibilities. There exists a multiplicity of managers performing essentially duplicative functions for the same types of consumable material. Each manager has developed his own management philosophy, policies, procedures, and data systems, resulting in significant waste, particularly in the areas of unnecessary manpower and supporting facilities costs. Additionally, the consolidation of procurement requirements for classes of consumable items rarely occurs. Thus, the possibility for substantial savings, which could be achieved by applying DLA's much higher level of price competition, is lost. Specifically, during fiscal year 1979 the military services awarded 25 percent of their procurement dollars competitively compared with 68 percent achieved by DLA centers. An analysis by the Defense Logistics Analysis Office (DLAO) reveals that, "For each 1 percent that DLA improves competition beyond the level achieved by the Services an annual savings of $12.7 million will result."

In December 1978, the Office of the Secretary of Defense proposed the transfer of consumables from the military services to DLA in order to achieve total potential savings of $200 to $300 million. The proposal provided data which demonstrated that DLA's management of consumables will improve DOD's overall logistics readiness and reduce costs.

The Army, Air Force, and to a lesser extent the Navy, are opposed to the consolidation of consumables under DLA for reasons that can be classified as parochial and sometimes emotional.

This section is intended to clarify the primary issues related to the OSD proposal.

At the end of World War II the Department of Defense operated 25 separate supply systems. Extensive fragmentation and duplication existed. As a result of the Hoover Commission Report, some progress began during the period 1953–56 with single manager assignments to the military services for commodities such as fuel, medical, subsistence, clothing, and textiles. Under these assignments, a single activity was designated as "class manager" with DOD-wide responsibility for all items in a group of Federal Supply Classes (FSC's). The next step toward integrated management was the establishment of the Defense Supply Agency (DSA) in 1962 and the transfer of the single manager commodities to DSA. (Note: In January 1977, DSA was redesignated the Defense Logistics Agency (DLA).

As additional FSC's were assigned to DLA, the Office of the Secretary of Defense decided that certain items should remain with the military services. These items included end items of equipment, depot level repairables, and selected consumable items. The term "consumable items" encompasses (1) expendable items; items including minor spare parts which are either consumed in use or discarded when no longer serviceable, and (2) field level repairables; ite repaired or condemned in the field, rather than items returned for repair at depot level.

The Item Management Coding (IMC) is the mechanism used to identify items or classes of items that are to be managed by the services or DLA. These are currently ten criteria which, if met, allow the military services to retain an item. The IMC criteria have been revised a number of times. The last major revision resulted from a Deputy Secretary of Defense memorandum of June 16, 1971, which established the principle of one item, one manager. Subsequently, 45 additional classes were assigned to DLA.

DOD uses approximately 4 million national stock numbered items which are categorized into 412 Federal Supply Classes. DLA currently manages about 2 million items. There are approximately 1.3 million consumable items managed by the services which OSD is prepared to transfer to DLA.

B. THE SAVINGS TO BE ACHIEVED ARE IMPRESSIVE

The Investigative Staff believes that the transfer of the remaining 1.3 million consumable items from the services to DLA could realistically result in annual savings of $200-$300 million. These savings will be achieved through the reduction of personnel and facilities as well as more streamlined, efficient, and economic procurement practices.

1. MANPOWER AND FACILITIES REDUCTION

The services' and DLA's wholesale supply systems are run by Government civil servants. There is only a light veneer of military management present in any of these organizations. Thus, the question of manpower reductions centers on the ability of these civilian employees to manage the items assigned to them. In May 1980, the Defense Audit Servide (DAS) compared the functions performed and costs allocated by the services in the management of consumable items to those functions and costs being incurred by DLA to manage the same type items. The review disclosed that the services were using 6,126 personnel at an annual cost of $116.7 million to manage their consumable items, compared to an estimated 2,391 personnel at an annual cost of $43.8 million by having DLA manage the same number of items.

The DAS comparative analysis appears valid and the estimated savings of $72.9 million seems achievable. Yet, the persistent question remains, "Why are DLA's civil servants more productive than the civil servants in the employ of the services?" The Investigative Staff believes the answer to the question is quite basic—DLA is in a better position organizationally than are any of the three services logistics commands. Specifically, DLA is a defense agency with a single basic mission—to provide supplies to the services when and where they are needed. If the DLA commander needs personnel, equipment, or facilities to accomplish this mission, he need only convince the Office of the Secretary of Defense, to whom he reports directly, and he will normally receive the required support. Senior service officers have expressed concern that DLA can receive this type of financial support, however, this is one of the characteristic advantages of all defense agencies.

The service logistics commands (DARCOM, AFLC, and NAVMAT), on the other hand, have a much tougher battle to acquire the resources they need to accomplish their missions. Even though these commands are headed by senior General or Flag rank officers, each of them must vie with other major four-star commanders, within their service for available dollars. Historically, there is ample precedent to show logistics commanders usually fare rather poorly in this budget contest. For example, the Director of the Budgrt at the Air Force's Logistics Command was asked about the types of projects that were funded or not funded at the end of the fiscal year. He stated that, routinely, facilities projects are deferred due to the lack of funds.

2. UNQUANTIFIED PERSONNEL REDUCTION WOULD ADD TO THE SAVINGS

The military services and DLA each have staffs at their logistics command headquarters and at the Inventory Control Points for developing and implementing policies and procedures, designing and programming data systems, and managing wholesale stock funds for consumable items. If the consumable items were transferred to DLA, the military services would no longer be responsible for the management of consumables or operation of their stock funds. Therefore related staff positions (about 4,000) and the supporting facilities could be reduced or eliminated.

3. STREAMLINING OF PROCUREMENT PROCEDURES

The largest potential area for savings clearly lies in achieving more efficient and economic procurement procedures. A review of FY 1979 procurement data reveals that the military services awarded only 25 percent of their procurement dollars competitively for consumable items compared with 68 percent achieved by the DLA centers for the same type of items.

DLAO presented the following data to support the competitive procurement difference between the military services and DLA centers for items subject to transfer.

[Dollars in millions]

	Fiscal year 1979 total	Competitive	Noncompetitive	Percent competitive
DLA	$1,398.6	$948.4	$450.2	67.8
Services	7,570.9	1,918.9	5,652.0	25.3

DLA has an aggressive program for "breaking" sole-source procurement. The objective of the program is to review currently noncompetitive purchased items, to find or develop additional technical data, and to interest new sources to bid on their solicitations in order to expand competitive procurement.

The DLAO analyzed the results of this program at three DLA centers with the following results.

DLA PROCUREMENT EVALUATION DOLLAR SAVINGS—FISCAL YEAR 1978

[Dollars in thousands]

DLA center	DLA evaluations		Savings	Percent savings
	Cost before	Cost after		
DISC (172 cases)	$3,834	$1,563	$2,271	59.2
DESC (48 cases)	2,636	1,502	1,134	43.0
DCSC (283 cases)	6,804	4,204	2,600	38.2
Total (503 cases)	13,274	7,269	6,005	45.2

During fiscal year 1980 the military services made $3,748 billion in wholesale stock fund purchases. Assuming the DLAO competitive percentage for the services is still valid (25 percent), then approximately $2.811 billion of these purchases were made noncompetitively. If these consumable items are transferred to DLA and DLA applies its procurement evaluation effort to these items, the potential for savings is $1.270 billion ($2.811 billion × .452), or for each 1 percent that competition increases beyond the level currently being achieved by the services, an annual savings of $12.7 million will result ($1.27 billion divided by 100).

The military services could possibly achieve some of these savings under the current distribution of consumable items. However, there are several factors which mitigate against pursuing this course. First, the Investigative Staff, in numerous discussions with military service procurement officers, perceived that these officers are primarily interested in receiving a quality product, when they need it, from a contractor who causes few, if any, problems. Cost-effectiveness and the pursuit of competition are less important considerations in their procurement philosophy, analysis, and procedures. Second, each of the services and DLA are procuring the same type items from various contractors around the country. There is no single source of information to determine the total DOD requirements for a particular type of item. The Investigative Staff is working with the Defense Contract Administration Service (DCAS) to develop the magnitude of this situation.

C. THE MILITARY SERVICES' OBJECTIONS

While the reasons for effecting the consolidation of consumables at DLA appear to be overwhelming, the Army, the Air Force, and to a lesser extent the Navy, are opposed to this proposal. Their concerns lie in three major areas: readiness (supply support), item complexity, and the validity of the economic analysis.

1. LOGISTIC READINESS

Operational readiness is dependent on training, maintenance, retail level of supply, as well as wholesale supply support. Only the wholesale supply support is the responsibility of the integrated manager and would be affected by the proposal to consolidate DOD's consumable items.

The services have expressed serious concern about the impact that transferring management of consumable items would have on supply support to customers and the consequent effect on force readiness.

There are two major components to "Logistics Readiness." The first is Supply Availability (percentage of requisitions filled from on-hand stocks) and the second is Total Pipeline On Time Performance (the promptness of delivery of material requisitioned). Of the two factors, Supply Availability is generally recognized as the most significant measure of supply support. This is because Supply Availability means the requisition is filled from available stocks, thus avoiding having to back order an item or have it directly delivered from a contractor. Either of these latter two actions routinely adds weeks or months of delay in satisfying the requisitions. On the other hand, the Total Pipeline On Time Performance represents, approximately, the percentage of items shipped which the requisitioner received on time. The term "on time" in this case refers to an arbitrary standard established by the Uniform Material Movement and Issue Priority System (UMMIPS). Shipments which are not on time by this criterion are often late by only a day or a few days. While the impact of even this lateness can be very important, it would not be as serious as not having the item in the system at all.

In order to quantify the ability of the Services and DLA to provide consumable supplies to their customers, the Investigative Staff obtained the following data.

SUPPLY AVAILABILITY PERCENTAGE—CONSUMABLES ONLY

	Army	Navy	Air Force	DLA
Fiscal year 1977	81.8	79.7	82.9	92.3
Fiscal year 1978	77.7	78.7	82.6	91.5
Fiscal year 1979	79.5	76.3	83.9	91.6

It is significant to note that the DLA rate exceeds the military services by 7-15 percent throughout the period.

The services have alleged that DLA's methodology in computing supply availability rates was different than the methodology used by the military services and therefore resulted in rates that favored DLA. There is no apparent basis to demonstrate a significant bias either for or against DLA.

The opponents to the consolidation proposal also state that DLA has a significantly larger number of nonstocked items than the services which, by definition are excluded from availability rates; thus, DLA's performance appeared better than it actually was. Investigation found the exact opposite to be true. DLA does have a larger number of nonstocked items in its assigned inventory than do the services, however, the number of customer demands for nonstocked items is higher in the services than in DLA. The Army's Medical Command in Europe told the Investigative Staff that DLA does not aggressively followup with the medical item suppliers and significant delays in the receipt of these nonstocked items is being experienced. The Army performed this function more effectively when they had the responsibility. Under the OSD proposal, DLA will not be assigned any more medical items than it already manages.

The second aspect of supply support which concerns the military services is the pipeline "on time" performance. This performance indicator measures the time from the date a requisition is initiated until the date the material is received by the customer. DLA's pipeline performance rate for its overseas customers significantly exceeds that of the services as shown below.

Overseas pipeline performance fiscal year 1981 (6 months) of on-time delivery

Activity:	*Percent*
DLA	79.8
Army	69.1
Navy	49.4
Air Force	74.5
Marine Corps	59.4

However, DLA's pipeline performance while less impressive is nonetheless believed quite acceptable for its Continental United States (CONUS) customers.

CONUS pipeline performance fiscal year 1981 (6 months) of on-time delivery

Activity:	*Percent*
DLA	75.1
Army	72.7
Navy	84.0
Air Force	70.9
Marine Corps	28.9

DLA's failure to achieve the highest percentage of "on time" deliveries to CONUS customers is related to a basic problem of distributing these items from DLA depots rather than military services depots. DLA's performance is attributable to three factors:

The geographical locations of the DLA inventories is not as conveniently positioned to the supported units as the service depots are.

The use of special contract air carrier services (LOGAIR) and QUICKTRANS, costing more than $100 million per year by the Navy and Air Force decrease these services' order and ship time. DLA uses this service to a much lesser extent.

Issues of DLA-owned material from Navy supply points which were not counted in DLA's performance indicator. These would have high "on time" delivery rates which could be compared to the issues of Navy and Air Force material as stated below.

Air Force stocks are stored at five Air Logistics Centers. These centers are themselves users of a major percentage of the stocks because depot maintenance and overhaul missions are also located there. This situation will favor Air Force statistics for "on time" CONUS deliveries.

The Navy is involved in a similar situation with six Naval Supply Centers being collocated with major ship servicing facilities. The other six major Navy Supply Centers are collocated with units having major aircraft maintenance missions. This situation will likewise reflect favorably on the Navy's "on time" CONUS delivery statistics.

A key question to all of these considerations is, "where will the depot stocks be stored?" Since the proposal's initial savings are in the areas of (1) overhead personnel reductions and (2) improved procurement methods, the depots stocks should remain in their current locations. The implementation envisions that DLA will perform the functions of inventory management and procurement while the individual service's depot will continue to receive, store, and issue the consumable items they currently have responsibility for. However, to realize the full potential savings of this proposal the DOD should be working towards the establishment of multipurpose depots. Currently, an Army unit in Texas has to go to Army depots located in Pennsylvania or California to obtain many of the items it needs while the Air Force may have a major depot complex only a few miles away. DLA has made some inroads in this area by collocating its stocks at a Naval Supply Center at Norfolk, Virginia, and at Oakland, California, with similar efforts scheduled for the Air Force's facility at Randolph Air Force Base, Texas, in the summer of 1981.

The potential for savings and the possibilities for improved readiness are quite evident and the establishment of multipurpose depots DOD-wide should be the next step after the transfer of consumables to DLA.

2. COMPLEXITY OF THE ITEMS TO BE MANAGED BY DLA

The military departments are concerned that the times they currently manage are far more complex and difficult to manage than those consumable items currently being managed by DLA. On the basis of the weapon systems applications and the technical characteristics of many of the service managed consumables, compared to those which DLA manages, the service managed items do tend to be more complex. However, the complex nature of the item is not synonymous with complexity of item management which is the key point.

The Defense Audit Service (DAS) reviewed this point in detail. The Army and Air Force argue that all of their comsumable items are complex while the Navy indicated that only 161,000 of their 520,000 consumable items were complex.

Accordingly the DAS auditors, in coordination with the services, developed a list of 22 item characteristics which constituted a profile of items "complex to manage." The auditors then selected a statistical sample of "complex" items from each service. The results are shown below.

SAMPLE OF COMPLEX ITEMS

	Army	Navy	Air Force	Total
Total sample	407	393	432	1,232
Considered complex:				
Per Manager	55	40	81	176
Per DAS Criteria	17	11	28	56
Conclusion: Within DLA Capability	407	393	432	1,232

DAS concluded that none of the service managed items were beyond DLA's capability to manage. However, in the event that a technical problem does arise which is beyond DLA's engineering capability, a procedure is in effect to cover this type of situation. Specifically, the joint regulation DLAR 3200.1—"Engineering Support for Items Supplied by the Defense Logistics Agency and the General Services Administration," clearly delineates the procedures for obtaining engineering support from the DOD component most knowledgedable of the item. The Director of Material at one Air Force Logistics Center stated that he has used this procedure as a basis for establishing a Memorandum of Understanding with a number of DLA Supply Centers to assure that engineering support is provided whenever needed. He stated that the procedure works well and he does not anticipate any problems in this area.

In addition to the DAS analytical effort and the Investigative Staff's operational level observations, there have also been some extremely high level interactions on this matter which are worthy of note. The Commander-in-Chief of the Strategic Air Command in a letter to the Secretary of Defense noted two examples of DLA's failure to be logistically responsive.

The first example involved radio tubes for the ARC-89 UHF (ultra high frequency) radio. The allegation stated that DLA procured unusable tubes from three defferent vendors or three different occasions thus crippling the Air Force's maintenance capability on the radio. Investigation confirmed that there was a problem with obtaining satisfactory tubes; however, it was determined that the tubes procured by DLA fully met the military specification provided to DLA by the Air Force.

The second example concerned a water tolerance coupling managed by DLA. The Air Force alleged that when problems occurred with the coupling, resolution took nearly a year, primarily due to difficulties with interagency communications (both organizations involved were commanded by Air Force general officers). The Air Force allegedly resolved the problem through in-house fabrication on the coupling. Investigation revealed that when DLA attempted to buy the coupling in 1977, the only known source had gone out of business. When DLA requested assistance from the Air Force engineering support activity in finding an alternate source of supply, the Air Force activity indicated that it knew of no alternate source of supply and recommded cancellation of the stock number. Doggedly, DLA developed a new source of supply but further delay ensued because of the contractor's 9-month production leadtime. In sum, it is doubtful that this problem could have been solved faster under Air Force management.

Subsequently, the Commander of the Military Airlift Command cited several examples of alleged poor support which, after investigation, could not be substantiated as "poor support." In fact one example, alleging poor DLA support of the C-130 throttle cable replacement problem is very difficult to comprehend in the light of the commendatory letter received by the DLA center from the Warner Robins ALC in February 1979, subject: Outstanding Support for C-130 Throttle Cable. This letter described the program to replace the cables as, "one of the most timely (and therefore, the most successful) in recent memory." The letter further noted, "that the success of this program was largely attributable to the outstanding support provided by you and your personnel."

3. ECONOMIC ANALYSIS

The December 1978 OSD proposal to transfer consumables from the services to DLA estimated an annual savings of $124 million. The services took considerable issue with the factors used in the accompanying economic analysis to calculate this savings. Subsequently, the Defense Audit Service (DAS) was asked to validate the analysis. DAS performed a detailed audit of the economic analysis and determined that, "the annual savings should be between *$62.9 million and $84.1 million.*" (emphasis added) However, the DAS audit was only based on a validation of the factors included in the original OSD consolidation proposal. The services were uniformly concerned that neither the original proposal nor the DAS evaluation had incorporated the guidance contained in DOD Instruction 7041.3 Economic Analysis and Program Evaluation for Resource Management.

Accordingly, the Defense Logistics Analysis Office was instructed to conduct a revised economic analysis using DODI 7041.3 and the most current data available. The results of this analysis are shown below.

ANNUAL RECURRING PERSONNEL AND COST REDUCTIONS

	Personnel	Millions
Operational direct:		
Services—decrease	6,132	$138.5
DLA—increase	−2,436	−51.6
Net recurring—decrease	3,696	86.9
Support/indirect:		
Services—decrease	648	11.1
DLA—increase	−316	−5.4
Net recurring support—decrease	332	5.7
Total recurring savings—decrease	4,028	[1] 92.6
Grand total		[2] 114.0

[1] 1978 dollars.

[2] 1980 dollars.

On July 7, 1981, the Deputy Secretary of Defense directed that 200,000 consumable items should be transferred to the Defense Logistics Agency. The transfer is to be accomplished within 6 months. Following the transfer, OSD will evaluate the situation and determine if it is desirable to move additional items.

D. INVESTIGATIVE STAFF'S OBSERVATIONS

The services can interminably rebut, or disagree with any economic analysis performed by any organization regardless of qualifications. It is virtually impossible to perform the finite analysis the services will continue to insist on. The Investigative Staff feels that there is sufficient data and evidence upon which to make a decision on this matter. The services' arguments against the proposal are parochial, and at times even emotional. The time has come to "fish or cut bait."

There are a number of management considerations that deserve attention and emphasis in accomplishing the proposal to transfer management of 1.3 million consumable items from the military services to DLA. However, in view of the magnitude of the estimated annual savings in direct costs of between $63 million and $124 million, and in view of the Secretary of Defense legal responsibility to, "take appropriate action (including transfer, reassignment, consolidation or abolition of any function, power or duty) to provide more effective, efficient, and economical administration and operation and to eliminate duplication in the Department of Defense;" it appears that the proposed realignment of management for all consumable items should be directed for implementation without further study or delay.

Senator **Levin**. Thank you.

Senator **Humphrey**. Thank you very much for your testimony and your time this morning.

The subcommittee stands adjourned.

[Whereupon, at 10:40 a.m., the subcommittee was adjourned.]

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